

OK
B.F.L.



Report at Ford School for Classes

Instruction to Be Given in Shop Mathematics; Enroll Dec. 7

Classes in logarithms and the use of the slide rule, gear design, and fractions are to be formed. Employees of the Ford Motor Company are invited to attend.

A knowledge of trigonometry is necessary for admission to the classes in slide rule, logarithms, and gear design. Any one is eligible to enroll in the class which is working fractions.

Those who desire to enroll in any of these classes should report to Room 205 in the school building on Thursday, December 7. The classes will be formed at this time and the date set for the first meeting.

Shenandoah's Ford Day

Concluded from page 1

and their co-operation went a long way in making the day a success.

Ford Day at Bakersfield, California, was unusually successful. More than 2,000 Ford cars of all ages and descriptions assembled in front of the courthouse and formed a procession which paraded the downtown streets of Bakersfield. The occasion was the city's first annual Ford Day which was sponsored by a business men's committee for the purpose of bringing farmers and others from all parts of the country together in one big celebration. Following the parade a varied program of events took place. The fire department staged an exhibition of putting out a huge fire, a hurriedly constructed building being set on fire for the occasion. There were many other drawing cards.

Ford Transportation Week in Minneapolis closed a big drive for truck sales, and the results were satisfactory, according to report. The Minneapolis Dealers were divided into two teams and the competition ran high. The team selling the smaller number of trucks was obliged to banquet the winners. A decided increase in sales activities was forecast due to the general interest manifested during Ford Transportation Week.

Webster, Massachusetts, staged a successful Ford Day, which was conducted by the local newspaper and assisted by the Lynch Motor Company. Publicity of the event was broadcast two weeks in advance and when Ford Day came the town and surrounding localities were bubbling with enthusiasm. Prizes were given and a band concert featured. The merchants of the town pronounced the day a big success.

"I don't read any magazine regularly or persistently." Others have said this.

But after subscribing to the Dearborn Independent they found that the remark was no longer true.

X-Ray Department

Concluded from page 5

vance was made, in the injection of air into joints, the abdominal cavity, and even the cavities of the brain and spinal cord, to reveal by clearer outlines the relative shadows which would be cast by tumors and other new growths. This gives only a suggestion of the further possibilities in development of the X-ray as a means of giving information about the abnormalities occurring in the human body.

There is practically no department of the body in which the X-ray does not aid in giving additional information. Fractured bones can now be set with certainty as to position. Tumors and diseases of bones can be detected at incipency. No estimate of the stomach and intestinal tract is complete without X-ray evidence. Not only is it indispensable in studying such diseases of the chest as tuberculosis but now in instances where the patient cannot be moved from his bed, in pneumonia, serious heart disease, a portable type of machine is brought to the bedside. There is information about the condition of the teeth which the dentist cannot obtain in any other way than by the X-ray. Perhaps the most dramatic application is in the detection and removal of foreign bodies aspirated into the lungs, and bullets lodged in any part of the body.

This is but a brief catalog of the everyday applications of this remarkable discovery by Roentgen, and constitutes only a way-station to its ultimate purpose.

To meet these requirements and the many more which will undoubtedly be developed in years to come, a large area at the Henry Ford Hospital has been set aside for the X-ray Department. The department is located in the very center of the hospital buildings and occupies the entire basement of the diagnostic building. It is easily accessible to both in and out patients.

In the space allotted there are six rooms devoted to general radiographic and fluoroscopic work and three rooms for dental work. Each of these rooms is a unit in itself,

having storage cabinets for the necessary equipment used in connection with the machine in that particular room.

In addition to the nine rooms where X-ray pictures are taken is a developing room fully equipped with the very latest and best articles for the rapid development of films; a drying room devised by the hospital, where heated air is forced into the drying cabinet by means of which films are dried in 15 minutes; a diagnostic room equipped with flat and stereoscopic illuminators over which the pictures are placed while being diagnosed; and a filing room where all pictures are kept indefinitely.

The X-ray machines are of the latest design and are almost noiseless in operation. They tilt to every angle by means of an electric motor.

The whole department has been furnished with standard hospital furniture and it is believed to be one of the most beautiful X-ray Departments in the country.

Those in charge are constantly looking for means to improve the quality of the work done and to make it the leading X-ray laboratory in the country.

Asphyxiation—Safety Item

Concluded from page 7

flew and struck one of the men in the eye with serious results.

A case somewhat similar to this occurred recently in the Millwright blacksmith shop. A flatter, the head of which was ground properly to prevent chips flying, under sledge hammer blows, released a chip that struck the blacksmith in the eye, resulting in loss of sight. It may be necessary to re-forge the heads of these tools so that the metal will not deteriorate.

The wise man will wear goggles wherever comparatively hard substances strike each other.

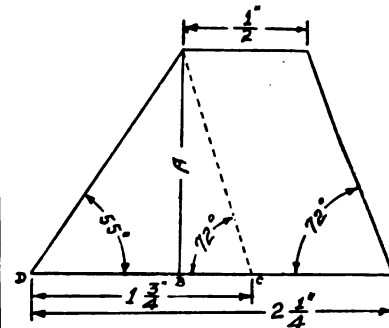
The people of Rhodesia, Africa, have decided to maintain their present status and not incorporate in the South Africa Union.

Problems

If there are explanations or comments regarding problems, write the Henry Ford Trade School, Ford Motor Company, Detroit, Michigan.

Solution to last issue's problem:

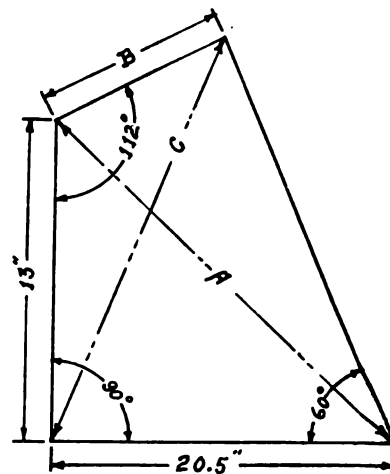
No. 48



$$\begin{aligned} \text{DETERMINE } A. \\ CD = 2.250 \cdot .5 = 1.125 \\ A = 1.125 \div (\cot. 55^\circ + \cot. 72^\circ) \\ 1.125 \div 1.02513 = 1.1071 \\ A = 1.1071 \end{aligned}$$

Try This

No. 49

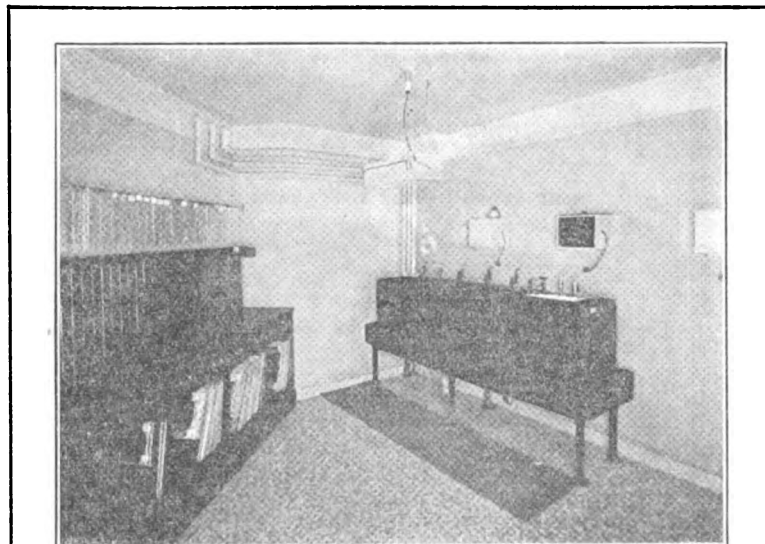


DETERMINE A, B AND C.

Dangerous Practice

A Rouge worker, interested in the welfare of his fellow employes, writes: "For several nights I have watched many of the midnight shift leaving the building and practically every auto displays someone hanging to the tire carrier or bumper. The cars travel fast and closely follow each other. Should one of these riders fall off, a fatal accident might result. Perhaps a warning in the Ford News will be sufficient."

Detroit, Toledo & Ironton Railroad men have apparently Safety on their minds at all times. The General Safety Department reports that a Detroit, Toledo & Ironton Railroad official, dreaming of a wreck, swung out of bed and broke an arm. This seems to be about the only type of accident outside the jurisdiction of the Safety Department.



Developing room, X-ray department of the hospital.

Digitized by

Ford News

Volume III. L

Dearborn, Mich., December 1, 1922

No. 3

25,000 Now Depositors

Investment Plan Grows; Extra 3% Payment Announced

Total Rate of Return for Six-Month Period Will Be 6%, Is Report

The 25,000 Ford employees who hold Ford Investment Certificates will welcome the news that the Board of Directors has authorized payment of an extra three per cent for the six months ending December 31. This makes the total rate of return for this period six per cent.

This return will be distributed among those in the employ of the Company on December 31, 1922, who have paid up one or more Investment Certificates on or before that date.

Checks will be distributed as soon as possible after January 1, 1923.

Yuletide Spirit in Concert Program

There is only one Ford Band Concert before Christmas and the New Year.

It is scheduled for Thursday, December 14, slightly more than one week before the holiday season starts.

The December concert will mark the end of the first half of the 1922-23 concert season. To date the concerts have been drawing capacity attendances and have been proving even more enjoyable to thousands than in former years.

There will be concerts in the Arcadia during January, February and March. Then employees will not have another opportunity to hear their band until the warm weather permits the start of the open-air season.

Following is the program for the December 14 concert:

- 1 March, "Florentiner," Fucik.
- 2 Concert Waltz, "Le Monastere,"

Concluded on page 5

Ford World News Flashes

Dallas, Texas—Practically all automobiles registered in Mexico City in September were of American manufacture, according to statistics recently obtained from the Mexican Government. The Ford led with 238 registrations, the Dodge second with 37 and the Studebaker third with 23.

Cincinnati, Ohio—Edward Houser weighs 427 pounds but he drives his Ford roadster on an average of nearly 50 miles daily, and it has been in use for five years. To permit Mr. Houser to get behind it, the steering gear was extended.

New Orleans, Louisiana—Fordson tractors have been in use by the Department of Public Works of New Orleans for some time, hauling garbage trailers and doing general utility

Concluded on page 5

Uses Ford Parts in Airplane Motor

Finds Them Equal to Task; Montana Man Makes Long Flights in Homemade Plane

That the Model T Ford motor will stand up under the most severe working conditions over a long period is daily attested, but what makes this possible is the fact that vital parts of the motor are of such quality and workmanship as will withstand strain probably never demanded in everyday automobile use. This was emphasized by a Broadview, Montana, man, who built an airplane using standard Ford parts as the basis of the motor. The cylinder block, C cylinder head, crank shaft, cam shaft, timing gears and connecting rods were of standard Ford make.

With this homemade airplane, Roy Grupe, the builder, flew recently from Broadview to Billings, Montana, a distance of about 35 miles, in 40 minutes. The trip was made without incident.

Grupe, who is a rancher, has been experimenting in building airplanes for several years. He has built his machines and learned to fly them without assistance or training. He built his first machine about two years ago, using a Ford engine.

Concluded on page 4

Utilize Slag for Cement

Capacity 2,000 Barrels a Day for Company Needs

Plant Now Under Construction; to Crush and Screen Slag for D. T. and I.

Slag, a hitherto waste product of the two blast furnaces in operation at the Ford Motor Company's River Rouge Plant, will be used in the production of a Portland cement.

The cement plant is now in course of construction at the River Rouge.

The cement will be utilized entirely within the Company, filling the requirements of construction work and improvement developments wherever needed throughout the country.

It is believed that the capacity output of cement will reach 2,000 barrels daily, following the experimental stage, when an output of 1,000 barrels is expected.

Slag from one blast furnace is quite sufficient for the production of 2,000 barrels of cement daily.

Limestone, necessary in the production of a Portland cement when slag is utilized, is already being brought in large quantities from Northern Michigan for the blast furnace requirements. Surplus limestone quantities will be used in the cement production.

Equipment to crush and screen slag for roadbed utilization is being installed in conjunction with the cement plant. This will be used for roadbed improvement along the Detroit, Toledo & Ironton Railroad.

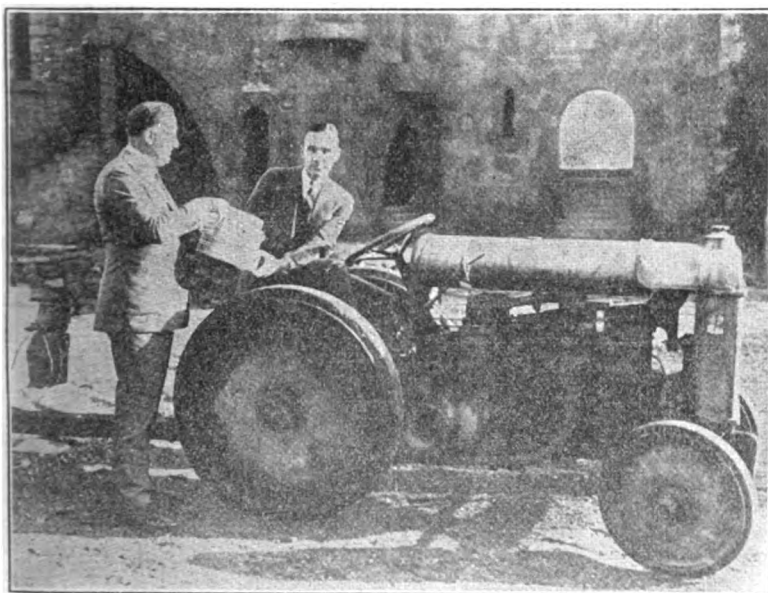
Ford Days Break Monotony Here

"Tomorrow is Shenandoah's big Ford Day and the committees have everything in readiness for one of the biggest events staged here recently."

Thus heralded in Shenandoah, Iowa, newspapers, Ford Day made a whirlwind start. There were prizes for unique Ford stunts. Thousands came to town to partake in festivities. In fact, a period of rather dull business was quickly transformed into one of good business. All business institutions contributing to the success of Ford Day were amply repaid in stimulated sales and the Crist Motor Company, Ford Dealers, were congratulated on putting over "Ford Day" with success. Shenandoah's newspapers talked about Ford Day for some time preceding the event

Concluded on page 8

Edsel Ford Visits Film Studios



Drives Fordson through movie city.

When Edsel Ford was in Los Angeles inspecting the Company's Branch Plant, the proximity of the motion picture studios induced a visit and here we see Mr. Ford about to drive the Fordson which aided extensively in staging Robin Hood.

The photograph reproduced above was taken at the Pickford-Fairbanks studio, although the

medieval English castle in the background doesn't remind one of Southern California.

The manager of the laboratory is handing Edsel Ford a print of Miss Pickford's latest version of "Tess of the Storm Country" which was then taken from the laboratory to the projection room by the tractor under Edsel Ford's guidance.

Ford News

ESTABLISHED 1920

Issued for the employees of the
various Ford Interests.

Vol. II. No. 9

December 8, 1922

PUBLISHED SEMI-MONTHLY

Motto

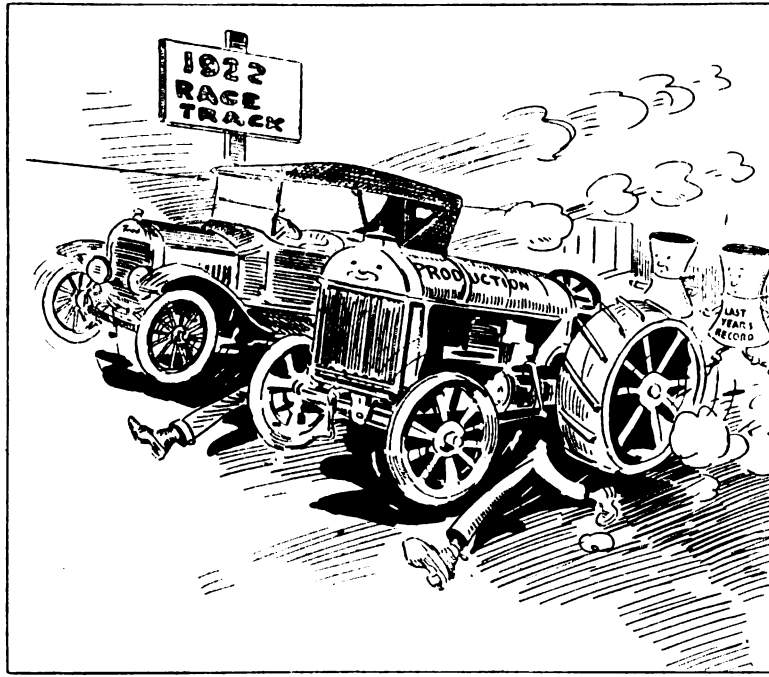
The first element of business efficiency is what used to be called Business Ethics, but which may be better described as the fundamental adjustments of business to natural law. There is a law by which things go ahead, and a law by which things go to pieces. This used to be only a faith with most of us, it seemed to have its sanction from above; now it is knowledge with many of us and is seen to have its foundations from beneath. Unless faith is always becoming knowledge, there will not be room for new faiths. Ethics in business is no longer sanctioned only by the "Ought" of good will, but by the "Must" of the Law. We not only feel but we know, and what is better, we know why.

—Henry Ford.

Citizenship

"Why do 50 per cent of the aliens in this country intend returning to the land of their birth as soon as they have saved up enough money?" This is a startling but true statement, declares a magazine published in the interests of industrial progress, and it continues, "Perhaps the situation may be due to governmental indifference or a like indifference on the part of industry." There is another thing also that effects the situation and that is America's indifferent sentiment toward the immigrant, the spirit, "Let them go; there's 15,000,000 others in Europe eagerly awaiting their chance to gain admission into this country." With this feeling on the part of many of the native-born, and others who have resided here for many years, it is impossible for the alien to adapt himself to a new world, when he is singled out by native classes as something of an unwanted personage. Today 60 per cent of our population is either foreign-born or of immediate foreign ancestry who have to a great extent made possible the industrial and agricultural expansion of the last 20 years. When the United States admits foreigners she intends them to become good citizens, bettering their lives, adding to the strength of America. When this fails, and they leave the country with what savings they have amassed, the nation loses not only wealth but what might have been a valuable citizen. Instead of adding to America, such immigration is thus proving a boomerang. Still there chants, "millions of others are com-

Making a Goal for 1923



ing," but will not millions of others do exactly the same thing?

Continuing, the article says, "More often than not the immigrant comes from peasant stock, farm bred and raised, and consequently the city with its high buildings and industrial structures does not appeal. We work him 10 hours daily at heart and muscle-breaking labor—at night he goes home to a smelly and sordid room in a tenement house or to a house which is merely one in a row of slouchy and poorly planned, poorly built houses."

As far as this is concerned the plan of decentralization of population and the giving away of urban congestion by the development of many smaller rural plants that workers may have more natural living conditions that are fast becoming possible only for the man of more substantial means, is one plan to aid this situation. That it is coming seems almost certain. It will be one of the achievements for the "New Era."

"If the melting pot really achieves its purpose," says the editorial, "if America still continues to be the refuge and dumping ground of all the world, we must, that is, industry and government, take some steps toward making citizens of our aliens. It is a real job, this, and in the final analysis whoever undertakes and carries out the work will be amply repaid for every cent it costs in the resultant types of racial amalgam who will be a credit to the country of their adoption rather than to the country of their birth."

"Some people study all their life, and at their death have learned everything except to think."—Dormer.

"Why do so many men never amount to anything? Because they do not think."—Edison.

PITHY PARAGRAPHS

The man who waits for things to turn up finds his toes do it first.—*Newspaper Enterprise*.

Motor accident records indicate that there are too many speed trials on the highways and not enough in the courts.—*New York Tribune*.

Opportunity knocks but once and that may be the reason that it has a better reputation than other knockers.

God made the world round; only men can make it square.—*Greenville News*.

Horse power has been sufficiently developed in the motor. What we need now is the development of a little horse sense in the driver.—*Baltimore Sun*.

No wonder the world's asleep with so much bunk.—*Columbia Record*.

Peace is a state of mind—of mind your own business.—*Wall Street Journal*.

A high-grade oil is to be manufactured from dogfish which swarm in Pacific waters. A newly formed company in the Queen Charlotte Islands, off the mainland of British Columbia, will catch the fish in traps and extract the oil by a new and patented process. The traps will not interfere with the salmon and other food fish.

He Never Heard of Prohibition Law

Is Now a Citizen and It Is High Time to Learn

Look at the Names of Those Who Violate the Eighteenth Amendment

Those who for money denounce prohibition and make its enforcement more difficult tell you that the "American people" are being "deprived of their rights."

Michigan State Police recently descended on Hamtramck, a village which lies entirely within the boundaries of the city of Detroit. The visit was a raid based on evidence of prohibition violations. The names of the persons arrested are illuminating. They are:

Theodore Haberski, Anthony Kintz, Joseph Stoklosa, John Crelski, William Zielinski, Joseph Benrski, Frank Scally, John Strykowski, John Bowich, Adam Chobian, Alexander Tarloff, Marion Banasiak, Steve Folkowski, Frank Wybrnec, Joseph Woyotis, Frank Karconis, Walter Petrowski and Constanti Polowski.

In a newspaper story of the affair, a feature of the day's news so appealed to the editor that he inserted it in the liquor story. The second story read:

Jacob Wiczarek never heard of the Eighteenth Amendment, and never heard that prohibition was in effect in these United States, but he was admitted to citizenship by Judge Arthur Webster.

Wiczarek lives in Hamtramck, which appears to have been regarded as an extenuating circumstance.

Honestly, it's much more difficult to believe that the American people are likely to vote back whisky, wine, beer, or any other intoxicant than it is to pronounce the strings of consonants that form the names of those who violate the Constitution of the United States, and you know what a tongue-twisting feat that last is!

Thinking

"Thinking makes the man."—Alcott.

"Thought is the seed of action."—Emerson.

"Thinkers are scarce as gold."—Lavater.

"Thinking, not growth, makes manhood."—Isaac Taylor.

"Learning without thought is labor lost."—Confucius.

"Man by thinking only, becomes truly man."—Pestalozzi.

"Nothing is so practical as thought."—Cecil.

"As a man thinketh in his heart, so is he."—Proverbs.

"There is no thought in any mind but it quickly tends to convert itself into a power."—Emerson.

Morgan Classes Business Asset

School for Owners and Prospects Proves of Value

Plan in Progress One Year, Teaches Facts About Auto and Its Care

It has been the experience of the Morgan Motor Car Company, Newark, New Jersey, that a Ford car instruction class is a good thing for both the Dealer and the car owner, and prospective owner.

Therefore when the Ford car instruction class was started last winter, it was done in the belief that there would be a sufficient number of people who owned Ford cars, and those who expect to own them, that would join such a class. The Morgan Company was not disappointed, as men and women in about equal numbers promptly applied for class membership. The matter was given some publicity in the newspapers, and letters were sent out to owners and prospects. The returns were prompt and satisfying.

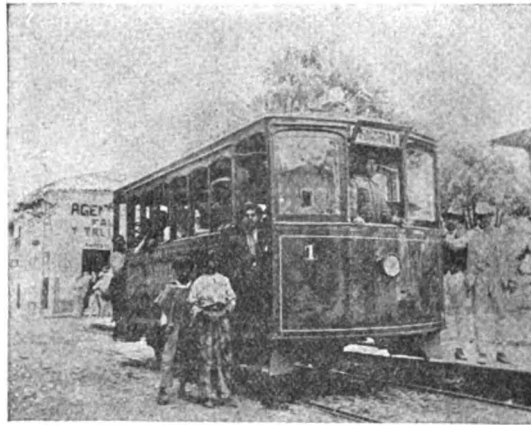
A splendid instructor was secured, a chap who had a silver tongue, who kept the pupils fully alive to the importance of Ford construction. The man in question had previously figured as a salesman instructor to one of the large automobile companies, and knew his subject well. The lecturer instructor spoke one entire evening on the famous three point suspension system which was original with the Ford car.

Then he took the Ford engine, and it required three nights to cover the now famous Model T. He showed the function of the pistons, the valves, and so on, and he went into the matter in detail, using a cut-away motor for the purpose. He would bring out points in regard to the Ford car which he declared were not only original with Mr. Ford, but that the salesmen for other companies were very careful not to elucidate or mention even when they talked of other cars, when the prospect brought up the subject of a Ford car, as no matter what the average car prospect is looking for in the way of a car, he usually will say something about the Ford car, and what is said is creditable to the reputation of the Ford product.

As a business-getter it was found the car instruction class was a first-rate medium, as it brought together a sort of Ford family, and they went out very much like the disciples of old, preaching the Gospel to all people. And that is where the reaping comes in from the sowing done with a Ford car instruction class.

The old battleship *Kearsarge* has been cut down and made into a crane ship, the only one in the world. The massive crane has a lifting capacity of 250 tons and is capable of tugging from its moorings an object weighing 500,000 pounds.

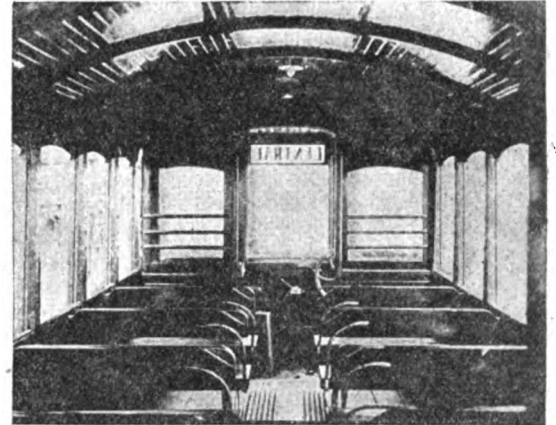
Something Different in Street Railways



While other cities are discussing trackless trolleys and auto buses as solutions for their transportation problems, Orizaba, Mexico, with a population of 50,000, seems to be getting along nicely with her "Ford" street car system.

The above photographs were sent to the Ford News by Mr. Abbott, of the Houston, Texas, Branch, who procured them while on a business trip to Mexico to establish Ford Dealers and to promote business.

There are 25 of these Ford-operated street cars in Orizaba and they maintain schedule consistently



and are giving adequate service. Who conceived the plan of operating a street railway system in such a manner has not been reported but whoever did so had an eye to business, for on this line there are no costly overhead wire systems, no central and branch power houses, for the Ford motor does all the work.

There are three different lines in Orizaba, one, in particular, running along a route which leads from the center of the town to a community 16 miles from Orizaba where six big cotton mills are operated. They employ 18,000 persons.

Camp Uses Fordson

Camp Meigs, Washington, D. C., invaded by an army of Fordson tractors, has been upturned, harrowed and transformed into the temporary state of a modern farm.

Logs have been "snaked" and sawed, wells dug, roads made, wheat threshed, dirt dumped into gutted ground and power for lights generated. And all through the work of the Fordson.

Auto Saved Nation from Collapse, Avers Barnes

Motor vehicles saved the United States from an utter collapse of agriculture, and probably industry as well, last year, believes Julius H. Barnes, president of the Chamber of Commerce of the United States.

"If the 2,600,000,000 tons lifted by

the railways of this country had not been supplemented by the 1,400,000,000 tons carried by motor vehicles, this last year, there probably would have been an utter collapse," he said.

Declaring that the motor industry still is in its infancy, Barnes said it is difficult to speculate on the future of the motor transport, and added:

"The situation in transportation has been clearly saved by the introduction of a new and real factor in transportation through the fortunately unregulated motor industry and the public highway. In the field of motor transport the play of natural law of supply and demand has saved the day. The advantage of the motor transport, with its flexibility of delivery and its elasticity of route service is clearly apparent, as long as the public highways afford roadbeds free and open to its operation.

"It certainly is true that part of the railway channels of today would never have been built, in competition with the more liquid motor transport, if that transport had then been in existence. This suggests, again, the vast potentiality of the motor industry in those sections of the world where vast potential tonnage is today waiting only reasonable access to market.

"Russia, Asia, Africa and South America all are vast potential markets for a form of transport that requires only a proper public highway to instantaneously develop the ex-

"The Ubiquitous Ford"



Camels unnecessary nowadays.

"The Ubiquitous Ford in the Heart of the Desert," was the title of this photograph which was published a short time ago in the London *Graphic*, a weekly magazine.

The familiar radiator and the somewhat unfamiliar background brings attention to the fact that the sun never sets on the Ford car. This Ford is used to convey political officers to Arab tribes.

Company Sells Ammonium Sulphate

Can Be Obtained Through Ford Dealers Soon

Arrangements have been made to sell Ford ammonium sulphate to anyone in need of fertilizer, within reasonable distance of the Rouge Plant. It may be obtained through the regular Ford Dealer, at reasonable prices.

Ammonium sulphate is a by-product of the coke ovens of the Ford Motor Company—River Rouge Plant. It is a white, crystalline substance, known the world over as the best source of available nitrogen. Ford ammonium sulphate is guaranteed more than 25 per cent ammonia and 20 3/4 per cent available nitrogen. (Nitrate of soda, the next best carrier of nitrogen, though better known, contains only 15 to 16 per cent available nitrogen.)

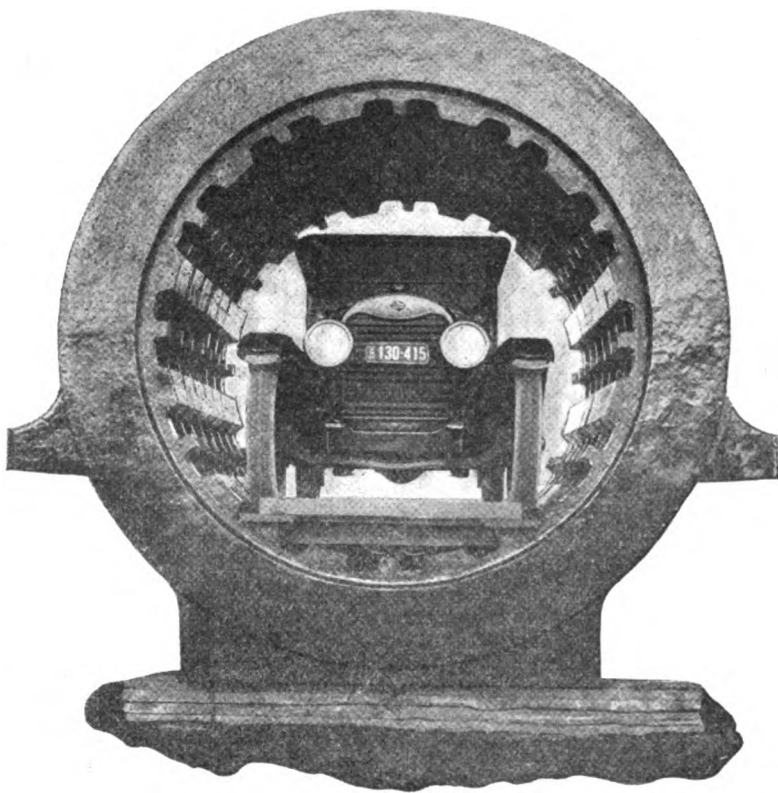
Nitrogen, the main constituent of ammonia, undoubtedly exerts more influence on the earliness, quality and yield of vegetables than any other plant food element. It may be applied as a top dressing, drilled, or broadcast and harrowed in. The usual amount to apply is 100 pounds per acre under normal conditions. It gives excellent results with corn, grain and grass and is also largely used in orchard fertilization. Ford ammonium sulphate gives particularly effective results with vegetables and truck crops. It can be dissolved in water, one teaspoonful per gallon, for greenhouse, garden or home use.

This sulphate should be used sparingly, since it is a highly concentrated carrier of nitrogen, and sufficient of potash and phosphates should be present in the soil to support the increased growth which will accrue from its use.

Ford ammonium sulphate is offered solely as a carrier of nitrogen and in this respect 100 pounds contain as much nitrogen as 132 pounds nitrate of soda; 290 pounds cotton seed meal; 1,600 pounds ordinary fertilizer; or 4,000 pounds good stable manure.

Webster, Massachusetts, staged a successful Ford Day, which was conducted by the local newspaper and assisted by the Lynch Motor Company. Publicity of the event was broadcast two weeks in advance and when Ford Day came the town and surrounding localities were bubbling with enthusiasm. Prizes were given and a band concert featured. The merchants of the town pronounced the day a big success.

Drive Lincoln Into Giant Casting



Here is the largest casting ever made at the River Rouge, and, as the photograph shows, it

was quite easy to drive this Lincoln model into it. The casting is of semi-steel and weighs 54 tons.

"There be three things which make a nation great and prosperous: a fertile soil, busy workshops, and the easy conveyance of men and commodities from one place to another."

Houston Puts on Ford Truck Parade

Below is a panorama of a truck parade conducted by Houston City Dealers. The interest these series of parades created was more than was anticipated. It seemed as though a circus was in town. Imagine 15 trucks traversing the principal business streets of the city with the horn button on each truck tied down so that the horn would blow continuously and the salesmen in each truck distributing truck and tractor literature and The Dear-born Independent.

The results obtained by this novel advertising venture were gratifying.

Want \$1,000? This Is Fast and Safe Way to Make It

Adopt Following Plan; It Will Help You to Succeed

How would you like to have \$1,000?

That would be fine, wouldn't it? Well, we don't know of anyone who is giving away any such amount, but here is a suggestion of a way to get it without doing any extra work.

Next pay day open a Ford Investment Account and deposit \$5 in it. Continue to deposit a like amount each week for 168 weeks, or a little over three years, and your account will amount to \$840.

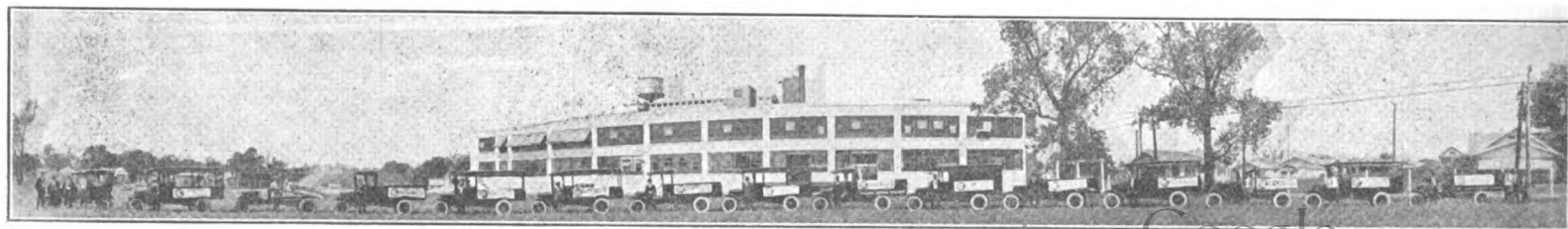
The interest and special return you will receive on these deposits during this period, if the Company continues to pay the same rate as in the past, will be about \$159.69.

When you get your first interest check from the Company, deposit it in a savings bank and do the same with each one you receive thereafter.

Banks pay about three per cent on savings accounts, so you would receive from them, during the same period, about \$4.24. This would bring your bank account to \$163.93. And the total of your Ford Investment Account and your bank account would be \$1,003.93.

Now let your thoughts run back over the past three years. The chances are, if you had taken \$5 out of each pay you would have gotten along just as well. If you had followed a plan of this kind you would be just about \$1,000 to the good now. Think what that would mean to you.

But vain regrets won't get you anywhere. The thing to do is to make up your mind to use the future better than you have the past. Start that thrift program now. Of course, when you find how easy it is after you get started, you will be sorry you didn't do it sooner, but "better late than never," as the saying goes.



Here is the Houston, Texas, truck parade, with plant in background.

Uses Ford Parts

Concluded from page 1

Grupe purchased a government scouting machine and learned something of the flying art.

Grupe's latest plane, in which he utilizes Ford motor parts has a 20-foot reach, the wings are four feet across and the length of the body is 17 feet. Spruce shipped in from the coast was used in the construction of the plane last winter. Grupe estimates that he can attain a speed of 65 miles an hour and he has reached an altitude of approximately 2,000 feet. He asserted that the machine is thoroughly reliable and that, as he acquires experience in flying, he can accomplish much more with it.

In its final form his home-built airplane motor would turn the propeller at a little better than 1,400 revolutions a minute. The completed plane weighed a little more than 500 pounds, fully equipped with gas and water. It would hop off in 150 feet.

Airplane motors are subjected to the hardest type of work. That these vital Ford parts were equal to the task is a matter of interest.

A large deposit of a volcanic ash, suitable to manufacture cleaning compounds, has been found in British Columbia. Experiments prove that it can be used to polish gold and silver plate.

Ford World News Notes

Concluded from page 1

work, which was once done by trucks and mules. The economy of Fordsons has been proved, too, by the road work done by a contractor who sold all his mules and equipped his stables with Fordsons, says a New Orleans newspaper, which also published a large layout of the tractor in industrial work.

Portland, Oregon—The accompanying sketch shows the present building, the three-story structure at the right, and a new structure, a one-story building, on the left, the latter erected recently

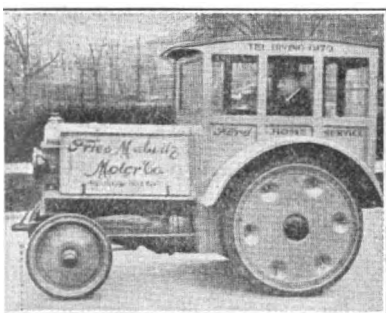


to give the Francis Motor Car Company additional quarters. The addition is similar in design to the first story of the main building, and will be so built that two other stories may be added when the business warrants.

Olean, Pennsylvania—The oil fields adjacent to this locality are absorbing a number of Fordson tractors. A Fordson recently made a very unusual climb, equipped with a Sheffield pulling reel. A pulling machine was hauled behind the tractor. The hill at one pitch was estimated an 80 per cent grade and none of the hill less than 50 per cent.

Greensboro, North Carolina—McGlamery Auto Company recently sold a complete Ford outfit—car, truck and tractor to a Guilford County farmer. It is interesting to note that there are considerably more than 300 Fordsons in Guilford County.

Chicago, Illinois—This Fordson "locomotive" never fails to attract attention when it appears on the streets. Sometimes it is



used to pull a trailer bearing a display of Ford cars, at other times one of the Fries-Malwitz Company salesman climbs into the cab and makes a call on a prospect.

Paducah, Kentucky—The McCracken County court clerk's record shows that from January 1, this year, to October 15, there have been 426 licenses issued for Ford cars and 185 licenses for all other makes of cars combined.

Houston, Texas—A half a dozen new Ford trucks are hauling mail from the post office to the railroad station here. The entire Ford fleet, however, will consist of nine trucks. They are said to be the first Ford trucks to be used for this purpose in or around Houston.

Portland, Oregon—Now they're buying them in terms of dozens. The Brooks-Scanlon Lumber Company recently placed an order with the Central Oregon Motor Company, Ford Dealers, for one-sixth dozen Ford cars.

Spread Christmas Cheer

Continued from page 1

taken from a letter, copies of which were sent from the Home Plant to all Branches. It shows efforts made by the Company to



Cut-out from Christmas film produced by Ford Motion Picture Laboratories.

spread the Christmas spirit the length and breadth of the country, using the Dealer organization to build up a co-operative, good-fellowship Christmas.

To further stimulate everyone in this work, the Ford Motion Picture Laboratories are shipping to each Branch prints of the motion picture, "Christmas Thoughts," which was produced by the Company.

This film has a Christmas story not lacking in cheerfulness, yet blended with pathos and "with plenty of heart throbs." The purpose of the Company in producing this picture is to render assistance to those who wish to work out a Christmas campaign.

Schedules for the showing of the film are to be made up by Branches and sent out to Dealers, in order that the picture may be busy throughout the holiday season. The picture will be shown in theaters and other places of large gatherings and will go a long way in encouraging Christmas spirit. A sub-title in the film

Concluded on page 8

The X-Ray Department of the Henry Ford Hospital

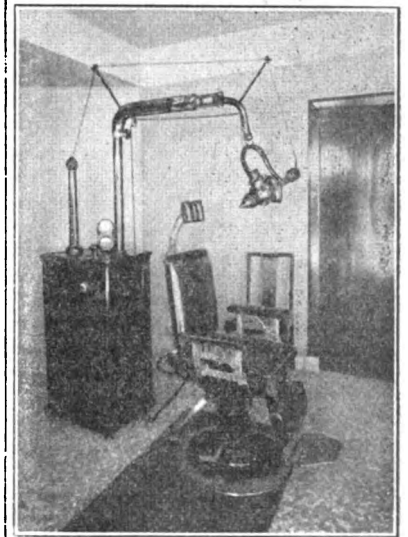
Aim to Make It Leading Laboratory of Its Kind in Country; the Story of the X-Ray

One day in the autumn of 1893, Wilhelm Konrad Roentgen, Professor of Physics at the University of Wurzburg, was called from his laboratory where he had been experimenting with vacuum tubes by passing an electric current through them. He laid the bulb, still glowing, upon

a book which contained as a bookmark a large, flat, metal key. It happened that underneath this book lay a photographic plate-holder loaded for use. Later, on developing the plate, he was astonished to find a shadow of this key. After considerable puzzling about this peculiar circumstance, he replaced the bulb, book, key and plate, and again passed current through the bulb. The same shadow picture resulted. He later placed his hand between the bulb and the plate and obtained a record of the shadows of the bones of his hand.

This was the first demonstration of the Roentgen ray, the X-ray, an invisible something which could penetrate solid substances. It was at once apparent that the density of the object determined the degree of shadow cast. Therefore, bones would cast greater shadows than solid organs, scars greater than ordinary flesh. From this has developed an aid to the diagnostic side of medicine, step by step, which is in the minds of everyone, far from having reached its goal. As a means of treatment, it may give early information which can prevent the advance of serious processes but also seems destined to play a most important part in the cure of tumors and other afflictions of mankind.

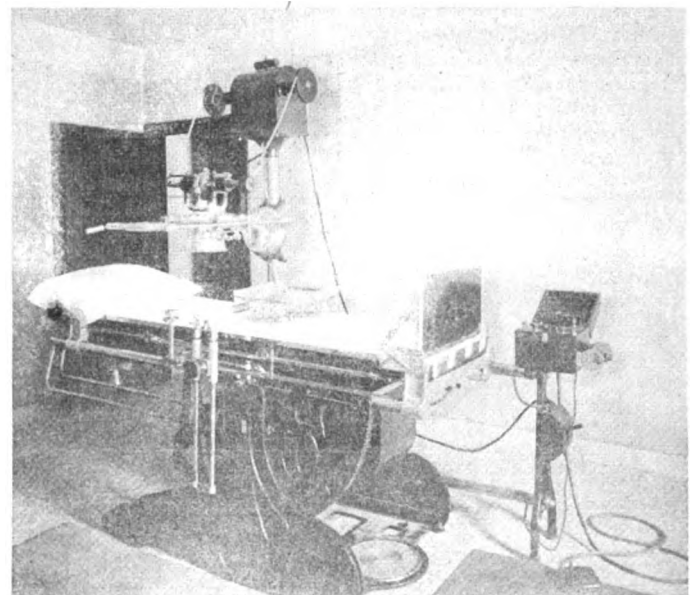
Roentgen knew that these rays had the power of making certain phosphorescent substances luminous. As with the photographic plate, solid objects, interposed between the bulb and these luminous phosphorescent



Dental radiographic unit at hospital.

substances are revealed in shadow outlines. By this means, such a wonderful and useful feat as observing the heart itself in motion can be accomplished. In the same way, if suspensions of heavy metals such as barium are introduced into hollow organs, the stomach and intestines, their position and form and movement can be studied in detail. Other metals, thorium, for instance, are used for the urinary bladder and tubes even leading directly to the kidneys. In the last year, a further ad-

Concluded on page 8



Type of X-ray used at hospital for general radiographic work.

Digitized by Google

Mendenhall Company's Plan Keeps All on Toes

Employees' Recreation Department Success

Combination of Good Will and Co-operation Makes for Efficiency, Is Belief

It is one thing to talk about service but it is another thing to give it. The most convincing argument a Dealer can give a prospect in this respect, is the appearance of his headquarters and the attentiveness and efficiency of the organization. Obviously, anyone might hold forth the most reassuring facts about service, but if the headquarters were not up to the minute, there would still be doubt in the prospect's mind.

This is the opinion of the Mendenhall Motor Company in St. Louis, Missouri, who aim to carry out such principles that will make for co-operative efficiency throughout the organization.

Below is a photograph of the Mendenhall Company's stock room for customers. You will note that the stock room follows the idea of making a showroom of genuine Ford parts only. There is a combination show case and counter—which is kept in an attractive condition all the time. In the show case is a display of genuine Ford parts, and there is carried a stock of about \$40,000 to \$50,000 at all times. This means that immediate service is always ready.

But the Mendenhall Company believes that employees cannot work efficiently unless they have become imbued with the spirit of the organization. Below we see the Company's recreation department where employees are given a 15-minute recreation period after their lunch hour, for which time they are paid. Note that there is a piano, victrola and magazine stand.

"In this manner," says the Mendenhall Company, "we try to keep our employees in a satisfied mood and try to make them feel that they are an absolute part in our business in every way."

"By creating this feeling among them we know they take more interest in their work and will turn out a better job than in any other way possible."

We have with us mechanics who have been in the Mendenhall employ for the past five years. We give every employee that has been in our employ six months a one-week vacation with half pay; that is, shop men that are paid by the hour. We give also a banquet every four months which is called our Service and Co-operation banquet."

Auto Saved Nation

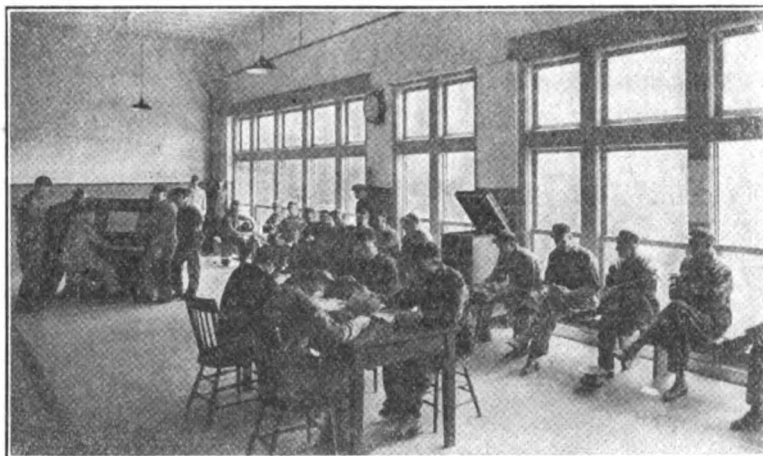
Concluded from page 3

change of commodities on which the employment and prosperity of the people follow with instant certainty.

"The point of saturation for the motor industry in America has been advanced again and again as motor transport itself developed earning and buying power for more and yet more transport.

"The motor vehicle for every 11 of our people was a dream beyond the wildest possibility 10 years ago. These vast populations of a world as yet unserved by transport, will, some day, and soon, demand this sure basis for trade and prosperous employment such as the motor has proved to be in America.

"These scores and hundreds of millions will some day absorb the output of American motor factories at a rate overshadowing even the fairy tale production of today."



Music, piano or victrola for Mendenhall workers in their recreation department.

Broadcasts Some "Americanisms" for WWI Fans

Following are excerpts from a speech of Senator-elect Ferris, given over the Ford Motor Company's Radio Broadcasting Station, Dearborn:

In the perpetuity of free government, obedience to the law is fundamental.

Moral skepticism is rife. It is the menace of this age. It threatens the sanctity of the American home.

Today parents are resorting to short-cuts to make real men and women. There is no short-cut for making efficient law-abiding citizens.

In the old-fashioned home children were taught and trained in the matters of obedience, honesty, sobriety, industry, thrift, self-reliance, self-control, co-operation and loyalty. But the American home is rapidly shifting its responsibilities upon the public schools.

Loose notions of marriage prevail. Many of our modern novels are saturated with sexual filth. These novels are read by thousands of our boys and girls.

Gas, Tire Costs Are Cut in England

This, With Price Drop, Forecasts Big Year in 1923

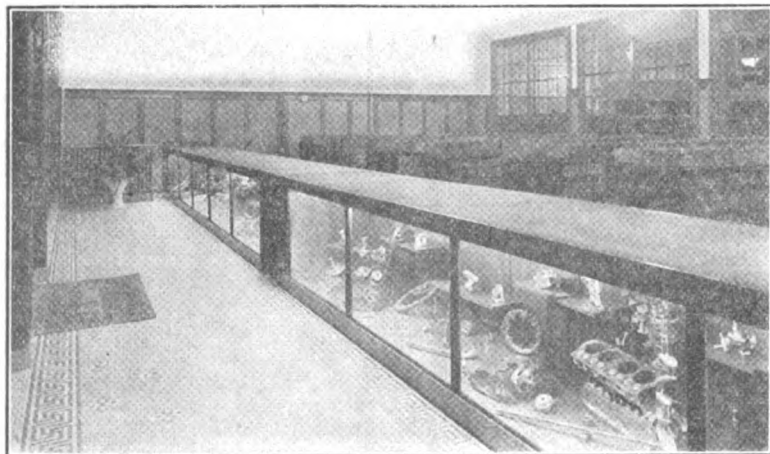
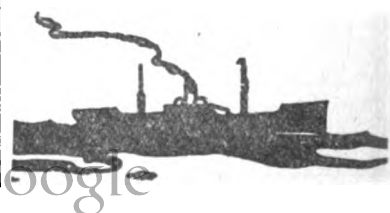
China Builds Roads for Automobiles Only; the Motor Truck in Belgium

England—Ford demand all over the country is fairly normal for the period of the year and may be called satisfactory. The great price reductions in gasoline and tires have made for the better, and for 1923 there is a general feeling of optimism. There is also a feeling prevalent that motor taxation will be lower after the first of the year and this will benefit demand. Ford prices also dropped in England and they are recognized as rock-bottom values. New prices have already speeded up demand.

France—Provisional figures are available for registration of motor vehicles during 1921 in the departments of Bas-Rhin, Haut-Rhin and Moselle, although details as to subdivisions are not published. These figures, nevertheless, give a better idea of the actual total of cars registered in the whole of France. To the total for the year 1921 may be added 2,502 cars for Bas-Rhin, 2,102 for Haut-Rhin, and 1,984 for Moselle, or a total of 6,588 cars, which brings the total registration in France during 1921 to 295,876. This means one car per 131 inhabitants, according to the 1921 census, as compared with one car per 161 inhabitants during 1920.

China—Motor traffic has been opened on the highway between Weihsen and Hwanghsien, a distance of 143 miles. The Ministry of Communications has granted monopoly rights to motor cars which will keep native carts with narrow wheel rims off the road and it will thus be possible to keep the road in repair.

Belgium—The use of motor trucks in Belgium is becoming more general as a result of the number of used trucks put on the market after the war. There is considerable traffic between the various towns of this thickly populated country and the sale of these war trucks has greatly increased the popularity of this means of transportation. Since American cars are already favorably known in Belgium, and because the Belgian manufacture of motor trucks has not progressed to the same degree as that of passenger-car manufacture in Belgium, there will be no difficulty in the introduction of good trucks of American manufacture.



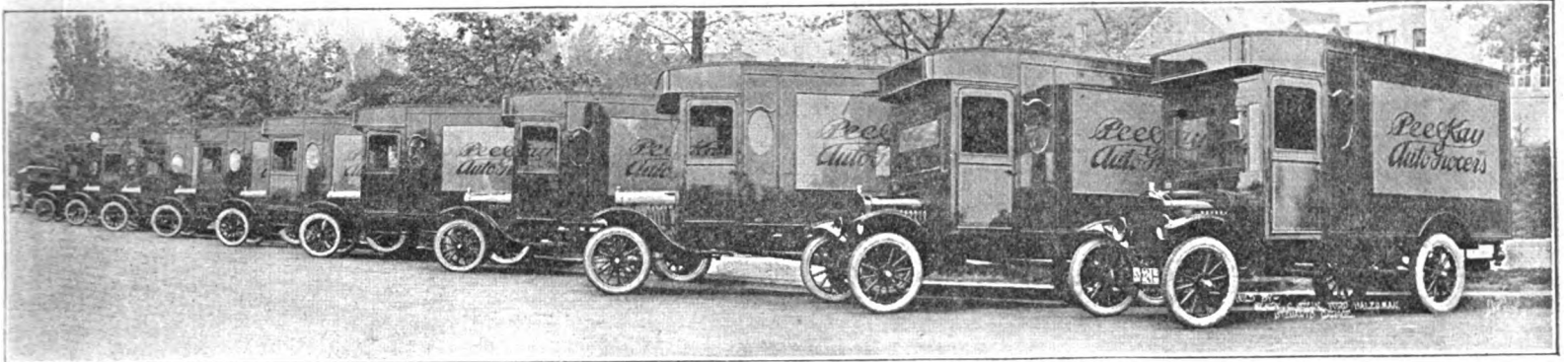
A stock room where order and efficiency are emphasized.

The deadly influence of this so-called literature is easy marriage and easier divorce.

The fundamental virtues must be brought back to the American home.

What would you pay for the services of a special staff of skilled men to keep you informed every week on national as well as international topics—is \$1.50 a year too much?

Are you discouraged looking for a real value in magazines? If you are, you have not yet read The Dearborn Independent.



Fleet of Ford trucks, each carrying extensive line of groceries, cover Capital.

Asphyxiation Is Probable If—

Motor Runs With Doors and Windows Closed

If Necessary to Run Motor for a Few Minutes, Throw Open Garage Doors

"Don't warm up your engine in the garage with all the doors and windows closed," warns Fred M. Rosseland, Chief of the Public Safety Division of the National Safety Council, in calling the attention of motorists to the danger of automobile exhaust gases in unventilated rooms. Although many cases of fatal carbon monoxide asphyxiation occur in private garages every autumn and winter, especially in northern communities, still the hazard does not receive the attention it deserves as a menace.

"A running motor in a garage 10x10x20 feet with doors and windows closed will in five minutes produce enough carbon monoxide gas to induce asphyxiation," says Mr. Rosseland. If the engine continues to run, the concentration mounts steadily toward a rapidly fatal amount. If it is necessary to run a motor for any length of time, take care to see that there is sufficient ventilation to keep the air clear. The deadly carbon monoxide contained in the exhaust gas creeps upon one and does its work without warning. The victim falls insensible before he realizes that anything is wrong. A slight dizziness is the only warning. Exercise of a little forethought in giving the garage sufficient ventilation while the engine is running will eliminate the danger."

In case of carbon monoxide asphyxiation from automobile exhaust gases, immediate application of the Prone Pressure method of resuscitation is immediately and absolutely necessary. Even a couple of minutes delay after breathing has stopped may be fatal—a quarter or half an hour is almost always fatal. The next step after restoring spontaneous breathing is to accelerate the elimination of carbon monoxide from the blood. Carbon monoxide unites with the blood and displaces the oxygen. Left in the blood it attacks the brain with disastrous results to the victim.

Extensive experiments, carried on recently by Doctor Yandell Henderson, of Yale University, and Doctors H. W. Haggard and A. L. Prince, showed that the only certain method of displacing the carbon monoxide was through the inhalation of a mixture of oxygen and carbon dioxide. Most municipal gas companies are now equipped with the apparatus for reviving victims of carbon monoxide poisoning.

"But preventive measures are much more to be desired than the use of resuscitation knowledge in bringing a victim of automobile exhaust gas back to consciousness," says Mr. Rosseland. "In this case the open door is the safeguard."



The repairmen, shown in the accompanying photograph, are driving back a sleeve. They have taken ordinary precaution by using a lead hammer between the two hardened steel parts. However, despite this, a piece of metal

Concluded on page 8

Complete Grocery Stores Are Built on Ford Trucks

Just One Camp After Another in 1923

Washington—The outlook now is that by the spring of 1923 these good old United States will be almost one camp site after another, and in every direction. The camp site idea started in the West, but other sections of the country were quick to take it up. Reports are many of plans in the making for the establishment of such sites all along the main traveled roads.

Municipalities have taken the plan seriously and motor clubs are assisting. At first the sites were not much to brag of, but they are now being improved from every standpoint. The result is they are sanitary, clean and comfortable. City light and water, a real system for the assignment of visitors to parking spaces, have helped materially.

There is a picturesqueness about a camp site also which makes an appeal. The suggestion of a strain of gypsy blood in the veins of most Americans is carried out in the avidity with which camping-out opportunities have been seized upon where they were the least bit inviting.

Washington Has a Fleet That Covers Entire City Easily

Pee Kay Auto Groceries' "Store at Your Door" Policy Proving Successful

Washington, D. C., has been termed the city of magnificent distances, but one thing more than anything else has moderated the force of this impediment to speedy business transactions and that is the automobile.

The Pee Kay Auto Groceries of the Capitol City have "Ford-ized" their business and Ford trucks carry a complete grocery store to the home of the Washingtonian, no matter how remote may be his dwelling place. Everything from a broom to a nutmeg is carried and the convenience of these traveling grocery stores is highly appreciated. The sale of these trucks was made by Steuart's Garage, one of our Local Dealers, says the Washington Branch and each of these trucks operates over a set route and becomes, as painted on the body, literally, "The Store at Your Door," being in position to deliver anything in the line of groceries. The bodies are designed and built for the specific purpose with shelves arranged to hold each article. Infinite care has been used that no inch of space is wasted. All sales are made purely on a cash basis.

The idea has worked out very nicely and gives promise of further advancement which will, of course, result in the installation of additional trucks; in fact, as business grows, there is practically no limit to the number of trucks that may be required. The owners of the Pee Kay Auto Groceries are very well pleased with the performance of the truck.

While these grocery stores on wheels have not been in operation a sufficient time to establish its permanency as a profitable investment, there is every reason to look for its continued success.

Short skirts, short sleeves, low necks and high heels in feminine apparel have caused several Swiss insurance companies, which insure against illness, to raise their premiums 15 per cent for women.

The reason some folks never get
anywhere is that they
never start

Start a
Ford Investment Account
and get somewhere

Glass Plant Will Be Built at Rouge

The Glass Manufacturing Plant of the Ford Motor Company will be located at the River Rouge, it has been definitely decided.

There is at present a plant at Highland Park which successfully experimented with glass production, but this will be abandoned when the plant commences operation at the Rouge.

Shenandoah's Ford Day

Concluded from page 1

and their co-operation went a long way in making the day a success.

Ford Day at Bakersfield, California, was unusually successful. More than 2,000 Ford cars of all ages and descriptions assembled in front of the courthouse and formed a procession which paraded the downtown streets of Bakersfield. The occasion was the city's first annual Ford Day which was sponsored by a business men's committee for the purpose of bringing farmers and others from all parts of the country together in one big celebration. Following the parade a varied program of events took place. The fire department staged an exhibition of putting out a huge fire, a hurriedly constructed building being set on fire for the occasion. There were many other drawing cards.

Ford Transportation Week in Minneapolis closed a big drive for truck sales, and the results were satisfactory, according to report. The Minneapolis Dealers were divided into two teams and the competition ran high. The team selling the smaller number of trucks was obliged to banquet the winners. A decided increase in sales activities was forecast due to the general interest manifested during Ford Transportation Week.

Spread Christmas Cheer

Concluded from page 5

says, "This film is loaned through the courtesy of the local Ford Dealer whose place of business is the headquarters for the Goodfellow Club."

The film is a story of how a group of bachelors had their happiest Christmas by making others happy—distributing Christmas baskets to those who held little thought of good things to eat.

And this is precisely what the Company urges each Dealer to do—organize a "Goodfellow Club" that will carry out the work, and in which their co-operation is rendered, and at the same time the motion picture will tell the story of their efforts.

"I don't read any magazine regularly or persistently." Others have said this.

But after subscribing to the Dearborn Independent they found that the remark was no longer true.

X-Ray Department

Concluded from page 5

vance was made, in the injection of air into joints, the abdominal cavity, and even the cavities of the brain and spinal cord, to reveal by clearer outlines the relative shadows which would be cast by tumors and other new growths. This gives only a suggestion of the further possibilities in development of the X-ray as a means of giving information about the abnormalities occurring in the human body.

There is practically no department of the body in which the X-ray does not aid in giving additional information. Fractured bones can now be set with certainty as to position. Tumors and diseases of bones can be detected at incipency. No estimate of the stomach and intestinal tract is complete without X-ray evidence. Not only is it indispensable in studying such diseases of the chest as tuberculosis but now in instances where the patient cannot be moved from his bed, in pneumonia, serious heart disease, a portable type of machine is brought to the bedside. There is information about the condition of the teeth which the dentist cannot obtain in any other way than by the X-ray. Perhaps the most dramatic application is in the detection and removal of foreign bodies aspirated into the lungs, and bullets lodged in any part of the body.

This is but a brief catalog of the everyday applications of this remarkable discovery by Roentgen, and constitutes only a way-station to its ultimate purpose.

To meet these requirements and the many more which will undoubtedly be developed in years to come, a large area at the Henry Ford Hospital has been set aside for the X-ray Department. The department is located in the very center of the hospital buildings and occupies the entire basement of the diagnostic building. It is easily accessible to both in and out patients.

In the space allotted there are six rooms devoted to general radiographic and fluoroscopic work and three rooms for dental work. Each of these rooms is a unit in itself,

having storage cabinets for the necessary equipment used in connection with the machine in that particular room.

In addition to the nine rooms where X-ray pictures are taken is a developing room fully equipped with the very latest and best articles for the rapid development of films; a drying room devised by the hospital, where heated air is forced into the drying cabinet by means of which films are dried in 15 minutes; a diagnostic room equipped with flat and stereoscopic illuminators over which the pictures are placed while being diagnosed; and a filing room where all pictures are kept indefinitely.

The X-ray machines are of the latest design and are almost noiseless in operation. They tilt to every angle by means of an electric motor.

The whole department has been furnished with standard hospital furniture and it is believed to be one of the most beautiful X-ray Departments in the country.

Those in charge are constantly looking for means to improve the quality of the work done and to make it the leading X-ray laboratory in the country.

Asphyxiation—Safety Item

Concluded from page 7

flew and struck one of the men in the eye with serious results.

A case somewhat similar to this occurred recently in the Millwright blacksmith shop. A flatter, the head of which was ground properly to prevent chips flying, under sledge hammer blows, released a chip that struck the blacksmith in the eye, resulting in loss of sight. It may be necessary to re-forge the heads of these tools so that the metal will not deteriorate.

The wise man will wear goggles wherever comparatively hard substances strike each other.

The people of Rhodesia, Africa, have decided to maintain their present status and not incorporate in the South Africa Union.



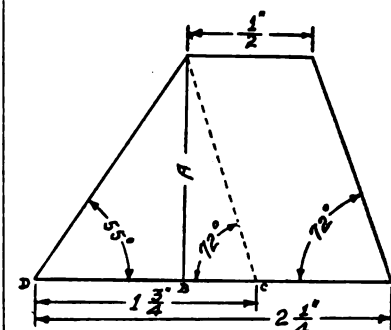
Developing room, X-ray department of the hospital.

Problems

If there are explanations or comments regarding problems, write the Henry Ford Trade School, Ford Motor Company, Detroit, Michigan.

Solution to last issue's problem:

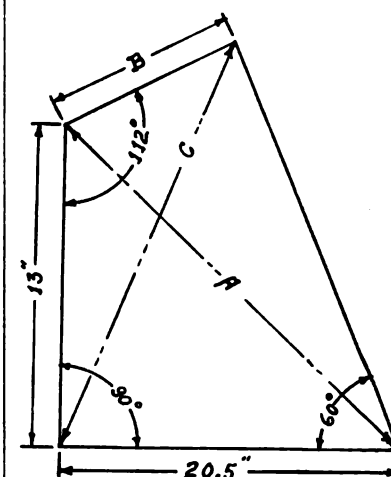
No. 48



$$\begin{aligned} \text{DETERMINE } A. \\ CD = 2.250 \times .5 = 1.125 \\ A = 1.125 \div (\cot. 55^\circ + \cot. 72^\circ) \\ 1.125 \div 1.02513 = 1.0971 \\ A = 1.0971 \end{aligned}$$

Try This

No. 49



DETERMINE A, B AND C.

Dangerous Practice

A Rouge worker, interested in the welfare of his fellow employe, writes, "For several nights I have watched many of the midnight shift leaving the building and practically every auto displays someone hanging to the tire carrier or bumper. The cars travel fast and closely follow each other. Should one of these riders fall off, a fatal accident might result. Perhaps a warning in the Ford News will be sufficient."

Detroit, Toledo & Ironton Railroad men have apparently Safety on their minds at all times. The General Safety Department reports that a Detroit, Toledo & Ironton Railroad official, dreaming of a wreck, swung out of bed and broke an arm. This seems to be about the only type of accident outside the jurisdiction of the Safety Department.

Ford News

Volume III. L

Dearborn, Mich., December 15, 1922

No. 4



Christmas "Goodfellow Club" Is Organized by the Company

Many Ford Dealer establishments throughout the country will become the headquarters for a Christmas "Goodfellow Club."

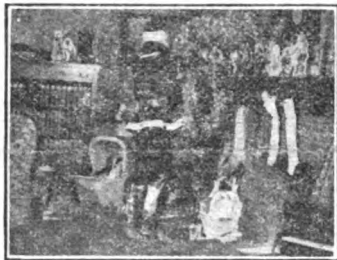
It promises to be the greatest club of its kind in the nation. It has it within its power to let happiness shine in places that would have been cold and cheerless on Christmas Day.

"Tell Mr. Dealer to make his place of business the headquarters for a Christmas 'Goodfellow Club.' This club will be composed of prominent business men of the community and will see that each needy family gets a Christmas basket. These can be sent from the 'Goodfellow Club' headquarters and the Dealer can furnish the cars to deliver the baskets."

The above quotation was taken from a letter, copies of which were sent from the Home Plant to all Branches. It shows efforts made by the Company to spread the Christmas spirit the

length and breadth of the country, using the Dealer organization to build up a co-operative, good-fellowship Christmas.

To further stimulate everyone



Excerpt from Christmas film produced by Ford Motion Picture Laboratories.

in this work, the Ford Motion Picture Laboratories are shipping to each Branch prints of the motion picture, "Christmas Thoughts," which was produced by the Company.

This film has a Christmas

Concluded on page 4

Merry Christmas— a Safe New Year

Why do we all anticipate a Merry Christmas? Mostly because the day is a commemoration of a birthday.

At the birth of a babe, when all are gathered around exclaiming how cute and how great he or she may be, the joy of the proud mother and father is naturally unsurpassed.

Each one of us in the Ford Organization should rejoice at this time and look forward to a wonderful future; not only because of prospects of steady employment and prosperity, but also because individuals as a whole are becoming more deliberate in their actions, and accidents, with the subsequent suffering and sorrow, will surely decline.

Let us contribute our share of this deliberation and thus purchase a gift beyond price for someone; that is, freedom from accidents that maim and kill.

For 1923 resolve to advise and warn those who have careless habits, and endeavor to devise ideas that, when applied, will save human life and limb.

The Department of Safety and Factory Hygiene wishes all a Merry Christmas and a very happy and successful New Year.

Sell 500 Tons Coke Daily

Company Ovens Provide Large Quantities for Workers

All Fuel That Can Be Spared Allotted
to Employees at Low Price;
Get Ton a Month

The Ford Motor Company, by producing coke and selling it to employees at \$8 a ton, is saving workers approximately \$100,000 each month on their coal bills.

According to estimations, about 500 tons daily are now being delivered to the homes of workers, which means that Highland Park, River Rouge and other Plants receive approximately 12,500 tons monthly.

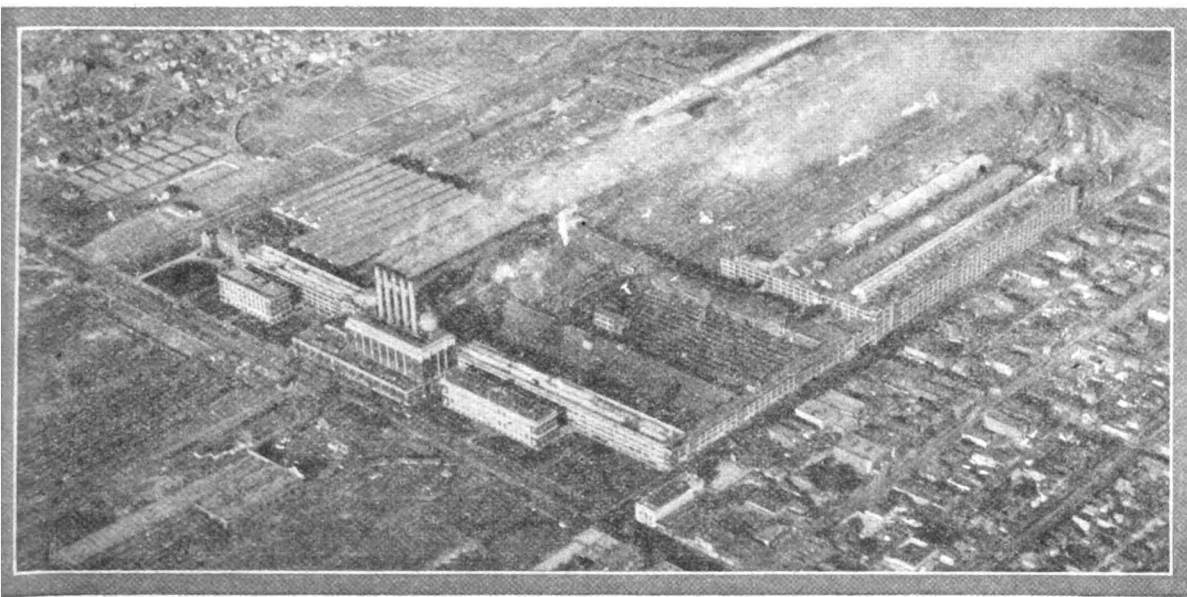
Thus this number of employees are assured of a ton a month, minimum, at a fair price.

With coke selling throughout Detroit and vicinity from \$14 to \$16 a ton, it will be seen that workers are, individually, able to save in many cases from \$6 to \$8, or practically what the Company asks for a ton.

The River Rouge Coke Ovens are producing about 45,000 tons of coke monthly at present rate of operation. However, all of this cannot go to employees. It is necessary to use 1,000 tons daily for feeding two blast furnaces, and 250 tons daily are utilized in the Company's foundry. In addition many tons are necessary in other branches of the Company's activities, but all that can possibly be spared is sold to aid employees.

Before the season ends in which fuel is necessary for domestic use, it is estimated that the Ford Motor Company will have saved the workers on fuel bills on coal and coke a sum that will approximate a million dollars.

A large number of instruction cards regarding the most economical methods of burning coke have been printed for distribution among coke purchasers, and everyone is urged to be saving in the use of coke so that the supply may go as far as possible and every worker get his share.



Probably not one employee, no matter how long he has worked for the Company, has seen the Highland Park Plant from this angle. The picture was taken from an airplane.

Digitized by

Ford News

ESTABLISHED 1920

Issued for the employes of the
various Ford Interests.

Vol. II. No. 10

December 22, 1922

PUBLISHED SEMI-MONTHLY

Motto

Should a young man study Politics? Yes, if he will make up his mind what Politics are to be 20 years hence. To study today's so-called politics would be waste of time—they are obsolete. Politics, in the true sense, have to do with the prosperity, peace and security of the people. Politics will become an administration of the people's affairs in the people's interest. If a young man wants to fit himself for the Politics of tomorrow, let him fit himself into essential industry for the purpose of learning how best to conduct it for the whole public good.

—Henry Ford.

Cut or Boost?

A well-known financial writer recently warned against price boosting, appealing to business to exercise moderation in marking price tags.

Undoubtedly the writer had in mind small business concerns as well as large ones. The manufacturer whose product sells for a small sum may mark up prices a few cents without any reason but to "feel out" the market. If sales remain steady the public can "stand" the price increase.

This profiteering was carried on on a large and small scale during the war, but there doesn't have to be a war to bring about unfair price boosting. The manufacturer today who believes the market can "stand" a price boost may precipitate a serious situation. If one person is able to "get away with it" others are always eager to follow. The public is unsuspecting for a time, but reaction usually brings a sudden drop in buying.

The public has not been blind during the last two years of price cutting. They have learned something

about costs, marketing and profits. Production costs had to be lowered, marketing expenses likewise and profits were slashed before the public was put in a buying humor.

Price raising seems fundamentally wrong; one of the biggest objects of any business should be the making of a product better and less expensive as time goes on. Such action would indicate that that business is developing efficiently in every department. Price boosting seems either to "cover up" costly or expensive departments or profiteering.

If business seizes better conditions as an opportunity to increase prices it will be making for the return of abnormalcy. To cut prices again might prove a much sounder business principle in the long run.

The Point of View

Did you ever go up in a balloon?

If so, your observation was from a different point of view from that of the fellow you left on the ground.

You had no sensation of motion.

The earth apparently was falling away from you.

To the man below you were rising.

His impression was correct, and you were mistaken, although, had you not known better, the evidence of your senses would have convinced you that error was truth.

So it is in life.

Each judges from his own viewpoint.

Do not be too positive about your own, but try and reconcile both, if they differ, and strive for a common ground.

This does not mean you must defer to his opinion, by any means, for you may be absolutely right and he in error.

If that, or the reverse, is the case, each should bear with the other until mutual study brings harmony of opinion, if possible.

There may be things in either view the other has neglected.

Many an inventor has found his work useless because he had not foreseen some little error in his work which did not develop until he supposed it complete.

There may be a point in the idea you carry which destroys its value; a point so simple as to cause you to wonder it was not seen before.

Nobody escapes such mistakes; but in most cases it is possible to bring reason into play and know your balloon is leaving earth and that earth is not leaving your balloon.

Did You Get His Number?



St. Paul Pioneer Press.

Christmas

The Christmas Day is coming, the Christmas Eve drew near,
The fir-trees, they were talking low at midnight, cold and clear;
And this is what the fir-tree said, all in the pale moonlight:
"Now, which of us shall chosen be to grace the holy night."

—Susan Coolidge.

My Santa Claus goes every day
With presents on his back,
In storm, or wild, or sunny weather;
His shoes must be of stoutest leather,
And so the big bag that holds together
The wishes in his pack.

—Annette Wynne.

Sing the song of great joy, that the angels began,
Sing the glory of God, and of good-will to man.

—John Greenleaf Whittier.

Conquers Desert; Persistent Pioneer

A 440-mile paved road from Phoenix to Los Angeles has been authorized by the electors of Arizona. State bonds for \$2,500,000 are to be issued and the first 100 miles of paved highway construction will start immediately. The highway will be an almost airline route.

Road construction to join the two points mentioned will be difficult, being through the desert where there are no living streams and but a few water holes. But Arizona believes that railroads cannot furnish an outlet adequate for modern business conditions and that the boulevard for automotive travel will not only greatly develop commerce in the state but will bring tourists who, with poor roads existing, would have taken other routes.

The automobile has been the pioneer in various phases of industry and development. Now it appears as conqueror of the desert.



Sales Record for California Made

October Total Greatest Monthly Mark on Coast

Hughson Company Sells 262 Cars and Trucks; Exceeding Quota Easily

By selling 262 Ford cars and trucks in October, the William L. Hughson Company established a record for the largest number of cars sold in a month on the Pacific Coast.

The quota set as the objective for the month's campaign was 250 cars and trucks, and that this mark was exceeded was attributed to the fact that each salesman was urged to work a little bit harder than he thought he possibly could.

The story of the campaign was given considerable space in Pacific Coast newspapers and the results were called a revelation to the automotive world of California.

Fleet of Fords for Rubber Company

Other Institutions Are in Market for Large Numbers

Clyde C. Thomas, a salesman for G. T. O'Maley Ford Sales and Service, convinced the Goodyear Manufacturing Company of Kansas City that their business could be materially increased by furnishing their salesmen with Ford cars and accordingly took one order for 25 Ford touring cars.

It is believed that an additional order of 50 cars will follow soon, which is more evidence of the value of the Ford in sales work. It shows further a field undeveloped. There are big institutions in the United States which will buy "Fleets of Fords," the Ford being the most economical transportation they can employ to cover their territories quickly and thoroughly.

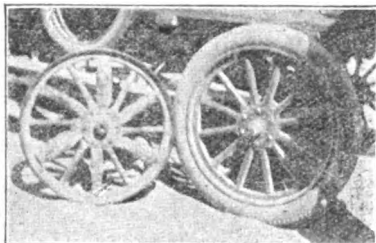
In Japan the popularity of the European small cars seems to be declining and American cars are regaining the predominant position which they held during the years of the war, according to a report from the Department of Commerce.

Christmas, happy Christmas, that can win us back to the delusions Of our childish days, that can recall to the old man the pleasures Of his youth, and transport the sailor and the traveler, thousands Of miles away, back to his own fire-side and his quiet home.

—Charles Dickens.

Wheel Made in Desert, Saves Day for Californians

Tucson, Arizona—Here is a Ford homemade wheel, made on the desert, after an accident, but it enabled the car to do its work. The Monte Mansfield Company tells this story: "It was rumored about the mining camp of Ajo, which is located about 135 miles from Tucson, that a man had arrived in camp utterly exhausted. He stated that a boat in which



he and Mr. Gloar, of Nogales, Arizona, had been traveling in was wrecked somewhere near Rocky Point on the Gulf of California, and that Mr. Gloar, he believed, was at that time wandering about in the desert country adjacent to the coast. Two Ford cars immediately started out from Ajo in an endeavor to locate Mr. Gloar, and after getting into the sand dunes 65 miles from any human habitation, one of the rear wheels of one of the Fords was smashed by the car dropping into an arroyo. It had been previously agreed that the two cars were to take different routes to locate Mr. Gloar, and for this car to proceed it was necessary for one of the occupants to whistle from Palo Verde wood, the only vegetation in that country, the wheel shown in the photograph. After many hours of hand labor the wheel

Concluded on page 6

Tractors Would Rescue Russia From Starvation

A shipment of Fordsons was recently made to Odessa, Russia. That they are direly needed there is reflected in an interview with David A. Brown, a Detroit, who recently returned from Russia where he had been active in relief and construction work.

New Start at 67 Though He Is Crippled

Following letter to Ford News from a crippled employee, who is 74 years of age and who has been with the Company 10 years, tells how he made good under the most overwhelming handicaps:

"Gentlemen: I have long wished to express my gratitude for belonging to the Ford Motor Company's family.

"More than 10 years ago, when I was given employment, I was very lame, having undergone three operations for a dislocated knee five years previous to this time. I had exhausted all my resources and was being supported by my daughter, with no prospects of ever being able to earn a living.

"During the 10 years that I have been with the Ford Motor Company I have bought a home, and by cashing my Ford Investment Certificates, which I have also bought with my earnings, I would be able to make the last payment on my home. All this has been accomplished since reaching the age of 67 years. I am now 74 years old. Although I am still lame, am in the best of health otherwise.

"When I meet each day all kinds of cripples and blind men, and notice the satisfied look on their faces, I think of Henry Ford as one of the greatest (if not the greatest) benefactors in the world. Sincerely yours, F. J. Horsman, D-1919."

"Fifty thousand American tractors," said Mr. Brown, "will do more than \$100,000,000 in foodstuffs to save the Russian people from starvation and put them back on the road to economic liberty."

Russia is wearing burlap coats and blanket trousers, he said, and is absolutely shoeless in rural districts.

"I've seen thousands of boys and girls with nothing but loin clothes," he said. "The rate of exchange when I left was 17,000,000 rubles for an American dollar, and women work for 25,000,000 rubles a month. Figure it out for yourself. The princely salary there is 100,000,000 rubles a month. In every store is a melancholy line waiting to trade a threadbare coat for something to eat. Tens of thousands of rich acres have grown to weeds. The situation beggars words."

Houston Branch Manager in Mexico

Makes Study of General Business Conditions in Republic

R. S. Abbott, manager of the Houston Branch of the Ford Motor Company, recently left on an extended visit among the Ford and Fordson Dealers in the republic of Mexico.

He will travel as far south as the Isthmus of Yucatan, where he will visit the Garage Montejo, located at Merida, Yucatan, the southernmost Dealer under his supervision. The Garage Montejo is 2,076 miles south of Houston.

A year ago Mr. Abbott made a similar visit to Mexico and made a particular study of conditions and this year he will revisit the same territory to make a comprehensive study.

Much time will be spent in Mexico City with the Ford Dealers of that city, but his trip will carry him as far west as San Geronimo, in the state of Oaxaca.

Economic conditions will be studied separately and compiled individually by states.

Particular attention will be paid to sales possibilities in an endeavor to decide what will be necessary to increase auto sales throughout the republic, and an endeavor will be made to educate the people in the uses of the Ford car for their particular needs.

Fordson tractors have met with great success on the better farms in Mexico, Mr. Abbott said before his departure.

Glow of New Sign Marks River Rouge Plant Site

Within Clear View of Rail Lines and Main Roads

Glowing in the night, approximately 2,500 electric light bulbs, each 60 watt, are used to mark the site of the River Rouge Plant.

These bulbs illuminate but three words—Ford Motor Company—in script characteristic of the Company, and their brilliancy is visible for miles.

Travelers and others who pass in railroad cars or various vehicles and who look inquiringly at the greenish glow that comes from the windows of the long buildings are not left to wonder what industrial enterprise

is hidden under cover of the night.

Not far from the illuminated letters is the main line of the Michigan Central Railroad, between Chicago, Detroit and New York, on which a large number of passenger trains speeds daily. Then there is, also, the Pere Marquette Railroad which passes in easy view. Traffic on Michigan avenue upon which there is an interurban service can also see the new lights.

It is interesting to note that the capital letters are 19 feet high and the other letters 6 feet. The total length is 126 feet.

The location is at the north end of "B" Building in which is housed the Fordson Tractor and Body Plants.

New Artists for WWI Make Hit

Company's Rouge Plant Orchestra Is Feature

**Saxophone Quartet Answers Plea,
Entertains for Second
Time**

Several artists of note have made their radio debut at the WWI Broadcasting Station in the last few weeks. Wednesday evening, November 15, Harry G. Funk, a baritone soloist, who was very ably accompanied by Mrs. Funk at the piano, entertained with three splendidly rendered numbers, "Sunset," "Down Among the Dead Men" and "Where Roses Gleam."

On this same date the Ford Motor Company River Rouge Plant Orchestra entertained with a series of pleasing selections. The weekly Health Talk was given by Dr. R. D.



Miss Jane Hicks

McClure, Surgeon-in-Chief of the Henry Ford Hospital. His subject was "Prevention of Cancer."

In answer to numerous requests the saxophone quartet from the Ford Motor Company Band entertained for the second time on the evening of November 22. Mr. R. T. Walker, soloist, entertained the listeners-in with three solos, "Sylvia," "The Trumpeter" and "Duna."

The Health Talk given by Dr. Frank Menagh, of the Henry Ford Hospital, discussed the use of light in the treatment of disease. A touch of humor was added to the program by the second of a series of talks that are being given by Miss Jane L. Hicks, Dearborn Publishing Company librarian, on Humorists of Today. Her subject was "Ring Lardner."

WWI followers received a real treat on Thanksgiving eve when they were entertained by a series of piano and violin solos by Mrs. Lewis Simpson and Miss Margaret Kruke. Mrs. Simpson, who is a graduate of the Royal Academy of Music, London, played Beethoven's Sonata—Opus 26 and "Pastoral Dance" by German. She also accompanied Miss Kruke, who is a member of the Detroit Philharmonic Orchestra, when the latter played "Adoration" by Borowski and "Berceuse" by Jocelyn.

Mr. Joseph Atkinson, tenor soloist, of the Dearborn Publishing Company, gave a trio of songs, "Thora," "Uncle Rome" and "Oh, Dry Those Tears." Dr. W. T. Garretson, Department of Surgery, Henry Ford Hospital, gave a very interesting talk on "Eyestrain."

New Rule Book

A new rule book is being made up covering the operation of the Detroit, Toledo & Ironton Railroad, and the Safety committees are requested to make immediate recommendation for changes or suggestions, advises the General Safety Department

Costs Cut at This Golf Course Now

Below is a reproduction of a Fordson tractor equipped with mowing attachment, which is used to keep up the fairways of the golf course at the Asheville Country Club at Asheville, North Carolina. In the background is the famous "Grove Park Inn," one of the best-known hotels in America.

Asheville is in the heart of the North Carolina mountains and is a very famous summer and winter resort. The Country Club golf course is just at the foot of Sunset Mountain and is consequently largely made up of knolls and fair-sized hills.

The fairways' committee was very hard to convince that a tractor could be operated successfully under the conditions mentioned above, but Mr. Richbourg, Ford Dealer at Asheville, would not allow himself to be discouraged and demonstrated the ability of the Fordson again and again until the most skeptical of the committee was entirely satisfied with the work done by the tractor.

At present hundreds of tourists witness the Fordson tractor hurrying up and down the hill, over a remarkably beautiful and well-kept golf course and the fairways' committee is highly pleased over the purchase made, because the cost of the upkeep of the course has been materially reduced.

English Farmers See Demonstration

A very interesting and effective Fordson demonstration was given by the Chaseside Motor Company, Limited, Ford Dealers at Cattlegate Farm, Cattlegate-road, Enfield, England.

A large assembly of farmers from a wide area were present to witness the demonstration, and great admiration was expressed at the way Mr. Neville, of the Ford Motor Company, handled the Fordson tractor and Oliver plow. The field chosen for the demonstration consisted of 11½ acres, and is understood to be the heaviest for miles around. For the last 42 years this field has been plowed with a single-furrow plow and two horses, completing about half an acre a day.

The Fordson tractor, coupled to a two-furrow plow, ran away with six men, six plows and 12 horses. The cost of using the tractor was only 7s. per acre inclusive, as against 25s. to 30s. per acre with horses.

Needless to say, one man alone handles the Fordson and plow.

There was a certain amount of criticism among the farmers present, many saying that it was the work for an expert only. To prove the statement to be wrong, a young farmer from Finchley was invited to try it. After one round with assistance, he managed the tractor and plow with perfect confidence and ease.

In these days of economy the Fordson tractor is coming into its own and fast superseding the old-fashioned methods of horse-plowing. The owner of the field volunteers the statement that in all the years he has been farming he has never seen his field so well plowed.

The recent London motor show revealed the fact that British producers are putting innumerable light low-priced cars on the market to supply a motor vehicle for the million. American cars retailing for the same prices are far superior and should find an ever-widening market.

Eggs sold in Denmark are numbered so that each can be traced to the farm from which it originated.

Star Saleslady for Ohio Dealer

Miss Jean V. P. Hatch is the star canvasser and Dearborn Independent saleswoman for the W. A. Kelly Motor Sales, of Springfield, Ohio.

In the last three months this organization has obtained approximately 1,000 subscriptions.



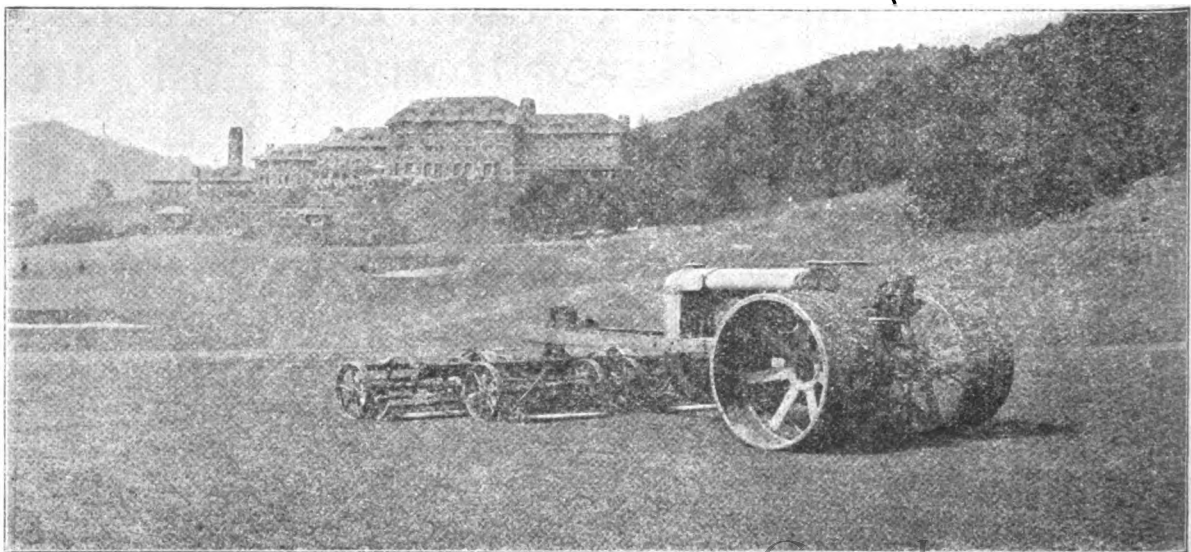
Miss Jean Hatch.

and a majority of them were secured by Miss Hatch in Springfield and surrounding territory.

Here is an excellent example of what can be done with properly directed effort.

This method of getting subscriptions is not copyrighted and other Dealers are urged to adopt it. Canvassing for prospects and soliciting subscriptions go hand in hand.

Winston-Salem, North Carolina—A 1920 Ford touring car operated by the North Carolina State Highway Department has been driven 35,000 miles in rough work and the total repair bills have amounted to only \$75. The car is in service every day.



Asheville Golf Course where Fordson works with success.

New Goal Set at Lincoln Plant

Open Offensive to Make Records During 1923

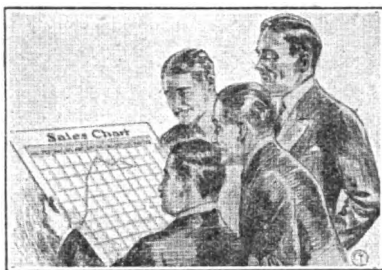
The Ford-Lincoln Plant has started toward a new goal, one where Safety rules and "He was at fault," "He should have done this," and "I told you so" are banished.

The Company has spent money to safeguard its employees from injuries that main, and expects employees in turn to observe all Safety rules so that accidents may not occur. It is but natural to do this. Even in the animal kingdom this protective instinct is found.

Success in life is due primarily to the practice of Safety. Safety in eating, resting, working, playing and investment of funds.

Let us resolve to be careful men at all times, and while we are making a better and greater car, develop a better and greater Safety.

Now for 1923



"It looks good," said the sales manager,

"But the factories are keeping pretty close to us on production."

"They had to break all records to do it though," chorused the salesmen.—Class Journal Company in *Printer's Ink*.

Now for 1923—the forecast is that all production records will again have to be smashed to keep pace with the sales.

Already plans are being made to meet the needs of a nation enjoying ever-increasing business prosperity and—"Over the Top" again!

Salt Lake Show

Concluded from page 1

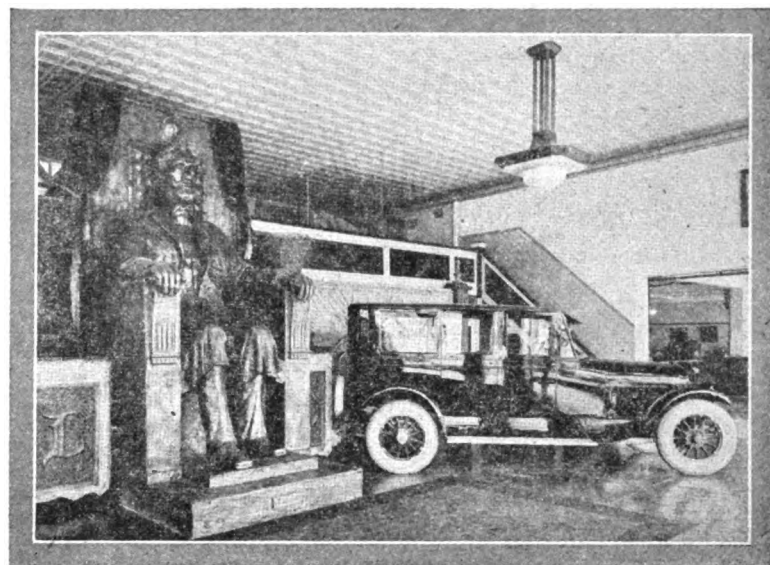
shovels and numerous other types of machines were in operation.

Another exhibit was a tractor converted into a locomotive for pulling cars on a narrow gauge railroad track. The display showed the tractor as it is being used by contractors, brick manufacturers, gravel companies, public service corporations, hauling experts and other industrial organizations throughout the country.

Manufacturers, building contractors, road contractors, general business and industrial corporations, farmers, public officials and educational authorities throughout the state attended. The general public was also welcome, and free admission tickets were given out.

When a locomotive rounds a curve the rail suffers from the pressure of 60,000 pounds a square inch.

Statue Made in 14 Days for Dealer's Exhibition



Lincoln, done in plaster of Paris in remarkably short time.

Unparalleled in the annals of automobile row was the Lincoln display staged by F. A. McKenzie, Dealer, Long Beach, California, recently, when the crowds of people not only had the pleasure of witnessing the latest models of Ford and Lincoln cars but of beholding an extraordinary likeness of Lincoln, done in plaster of Paris by V. E. Rutledge, a member of the McKenzie sales force, in the record time of two weeks.

Prominent artists from Pasadena and Los Angeles congregated in the

show rooms to pass judgment on the replica of Lincoln. And when they learned that in spite of its originality its sculptor had created it in 14 days, they were unanimous in stating that it was a work nothing short of phenomenal.

The figure and its setting are finished in a peculiarly attractive color scheme, an artistic combination of gold and other colors giving the effect that the statue is composed of bronze.

Concluded on page 8

Fordson Shows London the Way

Now and again the Fordson appears in the streets of London, England, showing the Britishers that the tractor can be used in industry as well as agriculture. England first became acquainted with the Fordson when hundreds were sent there during the war to convert every available acre into food-producing sections. But the Fordson later proved valuable to agriculture and industry in peace.

The photograph below shows the Fordson hauling a heavily laden wagon of the Great Western Railway, which weighs four tons. It proved quite successful at this work both for economy and speed.



Fordson on London's streets.

Repairs on Two Cars Only 25 Cents

This autumn the Northern Automobile Company, Jamestown, North Dakota, sold H. W. Anderberg and family two Ford touring cars. They left Jamestown for California on October 6, and arrived in Los Angeles on October 26, spending four days camping on the road. The length of the trip was 2,650 miles, making 5,300 miles for the two cars.

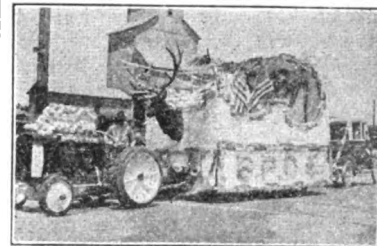
Their upkeep for the two cars on the trip, outside of gas and oil, was 25 cents for soldering radiator. The cost per car for gas and oil was approximately \$40. They had one puncture, seven of the tires going through with Jamestown air in them. They reported the roads fine with the exception of a strip through New Mexico.

"We believe this is a record for a trip of this kind—one puncture and 25 cents repair expense for the two cars," says the Northern Automobile Company.

Eight times the volume of water that flows over Niagara Falls was recently turned loose in the Panama Canal, to test the 14 spillway gates.

Heads Parade

Here is a picture of a Fordson used to haul a float in the parade staged by the Elks in Sterling, Colorado. This float headed the parade, and the tractor was suitably painted in purple and white.



Fordson in Elks' parade.

the Elks' colors for the occasion. The idea was out of the ordinary, and produced much comment.

Incidentally, the demonstration drew the attention of one of the largest hay and cattle raisers in that territory to the rubber-tired Fordson, with the result that after going into details with him the Sterling Dealer, Mr. A. M. Scully, took his order for a Fordson tractor with rubber wheel equipment. B.P.O.E. apparently may mean, when speaking of Fordsons, the Best Puller On Earth.

Lincoln Makes Record on Nation's Worst Road

Car's Stamina Shown in Terrific Pace Through Sierras

In two sensational runs in a Lincoln, William W. Bramlette, a California road driver, has set notable records over one of the most difficult courses in America, the route from Los Angeles to Bishop. Bishop is a fruit-raising center lying among the sub-ranges of the Sierras. The linear distance from Los Angeles is 285 miles and the altitude is 4,000 feet.

His first drive, made in eight hours eight minutes, was accomplished in a torrential rainstorm.

Certain that his Lincoln could do even better under fairer circumstances, he tried the drive again, and succeeded in cutting his time to 6 hours 40 minutes. This bettered the fastest train time over the same route by 54 per cent.

One-quarter of the route is smooth-surfaced road, mostly curving and steadily uphill. The rest consists of alkali flats, long stretches of gumbo mud and mountain trails strewn with loose stones. Bramlette, who knows roads, says this is one of the most difficult in America.

The task set for Bramlette was to break a motor record established by a courier of the War Department. For this test of stamina he selected a Lincoln standard touring car, which already had traveled approximately 14,000 miles. At the finish of his terrific drive the car was fit and ready to repeat the performance. The road record was memory.

On the morning of the scheduled test, rain was falling so furiously that the driver's friends urged him to defer his run until he should get what they regarded as a fair chance at a record. But he chose to take things as they were.

Over the shining ribbon of road through Burbank, Tropico and toward Mojave, Bramlette throttled his car down on the slippery pavements to a 45 or 50 mile-an-hour average.

Between Lancaster and Mojave he encountered a 12-mile stretch of sticky mud. But the eight-cylinder engine's stream of power sent the Lincoln plowing through the mud and Bramlette held the car on what there was of a "road."

At his own home town of Little Lake, 183 miles from the city, the car ran out of the last of the rain. A glance at his clock and speedometer showed Bramlette that not only was Lincoln stamina standing every punishment the road could give it, but that it was winning back the precious minutes lost on the slippery pavements.

The last 102 miles of the drive are the hardest of all. Here the route runs in between the Coso Mountains and the main range of the Sierras—continuous uphill climb, on a footing that goes strongly to sand, loose peb-



bles and rough rocks. It is in the shadow of the towering Mt. Whitney. In the face of such conditions the Lincoln held its steady pace, and at eight minutes after noon dashed into Bishop, coated with mud and desert dust.

Prepared for the record-breaking time by telegraphic bulletins from along the line, the population was out to greet driver and car.

Garage men acquainted with the difficulties of the route stepped forward with offers of assistance, but the car was driven back to Los Angeles without a single adjustment.

Convinced that his first record, good as it was, could be lowered materially under normal conditions, Bramlette decided to make another run that would prove the real speed and staying quality of the Lincoln car. And so he repeated his drive over the identical route, and covered the distance in 6 hours and 40 minutes. With favorable weather for his second attempt, he cut down his previous record by 1 hour and 28 minutes.

This second performance gives striking evidence of the tremendous handicap imposed by the weather conditions which prevailed when the first record was made. It also demonstrates the reliability of the Lincoln, a quality which enables it to repeat meritorious performances as often as called upon and to better them when conditions permit.

Wheel Made in Desert

Concluded from page 3

was constructed and the car proceeded to the coast over sand dunes where probably no other vehicle had ever been. Mr. Gloar was finally found on July 12 and taken back to Ajo. This homemade wheel stood up under a strain of road conditions unknown in the eastern section of the country, or rather the lack of road conditions, for a distance of 125 miles. To thoroughly appreciate the conditions that exist in the territory through which these two Ford cars traveled, suffice to say it is desolate, barren, desert country, fit only for rattlesnakes and Gila monsters. Water is only procurable in this district in very rare intervals."

How far do you live from the Poor House?

If you use the Ford Investment Plan regularly you will never need to worry about it.

Houston Workers Open 200 Accounts in Month

Investment Department Lauds Gain in Savings

Sudden Spurt in Investing Brings Houston Plant to Sixth From Top

During October the Houston, Texas, Branch opened more than 200 new Investment accounts.

The Home Office Investment Department advises that this is a good record for any Branch, one of the best that has been made, in fact, but is particularly good for Houston. They have been at the bottom of the list of Branches in percentage of employees investing for a long time, but this sudden spurt places them sixth from the top.

At that rate Houston ought to be 100 per cent investors before the new year.

But making a fine Investment record isn't all Houston has accomplished in this effort. It is a well-known fact that men who are thrifty and careful of their money are as a general rule better workmen and better citizens than men who constantly spend as much as they can earn. And by taking advantage of the Investment Plan as the first step toward thrifty success, the employees at Houston have merely set themselves on record as desiring to do more and to do better. They will profit immediately, and that profit will continue to come to them as long as their

attitude remains as it is, both as individuals and as an organization.

It is a mighty comfortable feeling to see your savings and your pay envelope getting fatter as the days go by. Ask any Houston employee about a year from now and find out.

Warning to Branches

Elevators in the Branches should be equipped with approved low bridges. This matter is not being given consideration in some of the Branches. Many operators do not know the emergency ring (one long and three short) which is to be used only in case of fire or accident, warns the General Safety Department.

Over Rockies in 8-Year-Old Ford

An eight-year-old Ford touring car, converted from a delivery van with a record of 100,000 miles, recently made an 1,800-mile tour from Winnipeg to Vancouver, Canada, following the course shown in the illustration below. A family of four with 300 pounds of baggage made the trip. The Ford, without experiencing any trouble, crossed the border lines of four provinces of the Dominion, three states and the international boundary line twice. "Can you beat it?" ask the Vancouver Ford Dealers.



Route followed by heavily laden Ford.

Digitized by Google

Danger Lurks in Christmas Gayety

Precautions Necessary to Safeguard Against Fire

Lighted Candles Perilous; Ornaments Should Not Be of Inflammable Material

The Christmas season, which always ought to be an occasion of joy, frequently becomes a time of tragedy because of the fact that the majority of households are unaware of the dangers which accompany the holiday celebration.

The Christmas celebration to which the children look forward should be planned with great caution. The old habit of placing a candle in the window has turned many a home of joy into gloom. The draft of air from an open window or door blows the curtain against the candle from which it takes fire, endangering the home. In endeavoring to extinguish the blaze, personal clothing ignites, which often costs the victim his life. In some instances, the candle is left burning all evening, while members of the family are attending outside celebrations. The wooden or pyralin base easily takes fire when the candle burns to the end, and from this the home is consumed. Moral—Do not allow the use of the "candle in the window," and advise your friends against the custom.

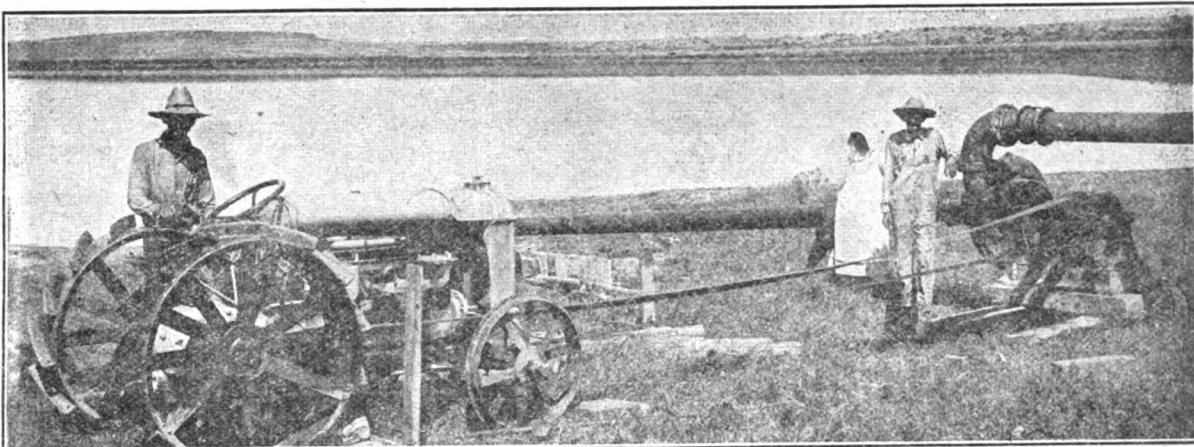
If you have a Christmas tree, it should be mounted on a firm base, as no one knows the strain it may be subjected to during its use. Place it in a section of the room away from heating and lighting fixtures. Use flake asbestos and powdered mica for snow effects, as these will not burn. Cotton and paper decorations are very dangerous. The tree should be illuminated with small electric light bulbs. Candles on a Christmas tree are unusually hazardous. Care should be taken in connecting the electric lights for the tree. It is advisable to call an electrician to do the work.

Ornaments for the tree should be of metal. Paper, pyralin or celluloid decorations are extremely inflammable, and will ignite at a comparatively low temperature. Toys involving the use of alcohol, gasoline or kerosene should be avoided and low-priced electrical playthings should be viewed with suspicion, since they are often insecurely wired or flimsily constructed. Christmas trees should be removed from the house immediately after the day's celebration, as they become highly combustible when they dry out from the heat of the room.

Heap on more wood! The wind is chill!

But let it whistle as it will,
We'll keep our merry Christmas, still.

—Sir Walter Scott.



This tractor pumped water from lake and saved cotton crop for Texas farmer.

Bounteous Crop Though Drought Hits Country

Fordson Pumps Water; Obtains Remarkable Results

Irrigation Brings in Yield Far Greater Than Obtained by Farms Without Water

In many sections of the country Mother Nature cannot be depended upon to furnish all the moisture needed to raise and harvest profitable crops. But businesslike landowners insure themselves against loss as far as possible by including in their farm equipment modern machinery that is capable of being adapted to emergency situations.

At any rate that is probably

the conclusion of a cotton grower living near Clarendon, Texas. By using the Fordson to pump water during a drought and giving new life to the crop a yield of one bale of cotton to the acre was obtained, while in cotton plantations so near as across the road from this particular farm only one bale of cotton in 10 acres was secured.

The story of this excellent work is told in the above photographs. Here we see the Fordson operating a pump which drives the water from this small lake to the acres planted in cotton which is drying up for want of moisture. In the smaller photograph is shown a section of the flourish-



Irrigating the crop.

ing cotton crop made possible only by the work of the tractor.

The Clarendon Motor Company, Dealers, of Clarendon, Texas, are situated in cotton-growing districts and when the drought was a topic of the growers, that organization worked out a solution for the situation. A water pump was secured, pipes run from a near-by lake to the fast drying up land, and, at the edge of the lake, a pump was installed, with the Fordson belt attachment doing the labor.

Thus, through the initiative of the Clarendon Motor Company, crops were saved and farmers were shown the wisdom of using power-farming equipment.

In many parts of the country there may develop situations which will parallel that mentioned above, and the example set by the Clarendon Motor Company is a good one of which to make note.

Fords Carry Many South for Winter

Jacksonville, Florida—Somebody in Maine or Minnesota discovered a few years ago that he could load his family into the family Ford and drive to Florida for the winter at an expense about equal to the railroad fare for one person.

Now motor cars with frying pans, lanterns, coffee pots, buckets and other utensils attached from radiators to spare tire racks, descend upon Florida in droves, bearing the vanguard of the thousands of tourists who mo-

New York to Los Angeles

From New York City to Los Angeles, in 23 days, via Ford Sedan, is the trip recently completed by two young ladies, Miss Fraser and Miss Leonowens. According to one prominent Ford Dealer of Los Angeles, the question of whether a closed car is practical for cross-country trips is conclusively answered in this instance, for the trip was made without difficulty by these fair drivers.

"The so-called 'perils' of cross-country trips are much exaggerated," says Miss Fraser. "It is perfectly feasible for a woman driver to make a successful transcontinental trip. You will find so many cars passing both ways that even should you experience any trouble with your car, it is very easy to secure assistance.

"As we were not trying for any records, but desired to see the country, we made a leisurely trip, stopping a day here and there. Even at that we averaged 153 miles each day of actual running. We planned our trip so that we reached a hotel each night, with the exception of one, which we spent in the car. In our snug Ford Sedan we were quite independent of the weather. In Mis-

souri we struck heavy rains, while in Arizona we encountered sand storms, but by simply raising the windows we were comfortably protected. We feel that this is the ideal way to make a transcontinental trip, and if we were called back to New York, we would certainly choose the same method of conveyance."

This is one of the first instances on record of a cross-country Sedan trip, from coast to coast, and perhaps the first on record wherein the journey was made by females. The young ladies are highly enthusiastic, and others will undoubtedly follow their example now that they have "blazed the trail."



Great Truck Production

Concluded from page 1

ued steady progress in the light truck industry. Increased truck sales to an important degree follow in the wake of better business which necessarily requires greater and improved transportation facilities, and since the business forecast for this year is more than encouraging it is logical to predict another year of gain for the truck industry. Although the 1922 truck production as a whole did not reach the boom production mark set in 1920, yet the figures were substantially greater than for 1921, and automotive experts declare that a similar if not greater gain can be expected this year.

The reason for the past two years' growth in the use of trucks in all types of businesses must not be attributed wholly to the general growth of the automotive industry. While it is an integral part of the industry yet this type of vehicle built strictly for commercial use has done wonders in economizing in the transportation of materials, from producer to factory and from factory to dealer, thus aiding in lowering the cost of various products, farm and otherwise, and

thus automatically enlarging the market. The light, inexpensive motor truck's merits have won an important place for it in American commerce and its growth is expanding rapidly in many other countries.

That the motor truck suffered heavily following the business slump of two years ago was not in any way a reflection on the efficiency of this type of vehicle. It suffered because progress was at a standstill. Business firms could not see their way to do anything other than get along with present facilities, no matter if the investment would prove an ultimate economy and mark of enterprise.

Steadily improving business this year means steadily improving methods of carrying on business which promises to bring demand for trucks that will easily surpass that of 1922.

Pueblo Ford Day

Concluded from page 1

with the magnitude of the affair and the cars entered for prizes were driven out to Aberdeen so the judges could make their decisions and award the prizes.

The long line of entries and the

tremendous interest created far exceeded expectations of those who planned Suburban-Ford Day and surpassed the hopes of the Business and Professional Women's Club members who suggested the event as a means of advertising Pueblo to the suburban trade territory and suburban customers of the city.

The Ford Farm

Concluded from page 4

portance is the careful selection of the seed wheat. This must be free from all foreign matter including shrunken kernels, smut, cockle and mustard. In the Ford elevator at Dearborn the selection is made and only after many separations, insuring the removal of all impurities, is the wheat rendered fit for seed.

After the planting Mother Nature takes up the work and unassisted she brings forth acres of waving golden grain ready for the harvest.

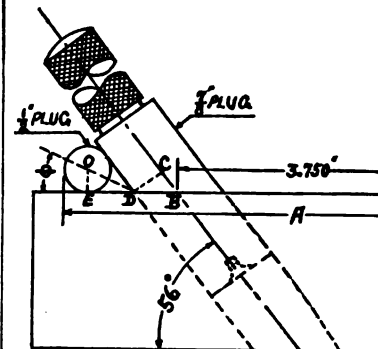
More than one-third of the total area of Holland lies below the level of the sea which is kept back by means of dikes.

Problems

If there are explanations or comments regarding problems, write the Henry Ford Trade School, Ford Motor Company, Detroit, Michigan.

Solution to last issue's problem:

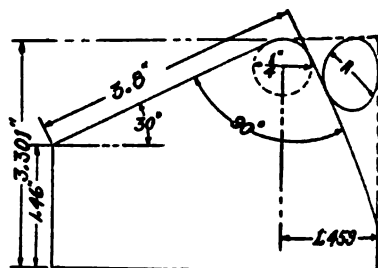
No. 54



DETERMINE A.
 $CD = .875 \div 2 = .4375$
 $BD = CD / \text{COSEC. } 56^\circ = .52771$
 $\text{ANGLE } \theta = 56^\circ \div 2 = 28^\circ$
 $EO = .5 \div 2 = .250$
 $ED = EO / \text{COT. } 28^\circ = .47017$
 $A = 3.750 + BD + ED + \text{RADIUS OF PLUG} = 3.750 + .52771 + .47017 + .250 = 4.99788$

Try This

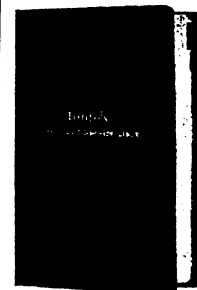
No. 55



DETERMINE DIA. A.

"Fordex"

"Fordex," a handbook of facts and figures of Ford products, is produced by the Sales Equipment Company, 620 East Hancock Avenue, Detroit, Michigan, and can be purchased at \$3.50, postage prepaid. In compact form there is Ford information that is valuable to Dealers, salesmen and service men. Contents are grouped in logical order, starting with the Model T, truck, tractor, and so on.



Italy leads the world in the manufacture of violin strings.

Facing the Issue Squarely

One reason for the rapid growth of THE DEARBORN INDEPENDENT is due to the fact that no matter what problems or conditions it discusses, this publication ALWAYS FACES THE ISSUE SQUARELY.

Being non-partisan, non-sectarian and free from any entanglements, THE DEARBORN INDEPENDENT publishes information based on facts and nothing but facts. More than 300,000 subscribers testify to its value and thought-provoking qualities. Any Ford Dealer will gladly accept subscriptions or they may be sent direct, using the blank below.

USE THIS BLANK TODAY!

F. N.

THE DEARBORN PUBLISHING CO.

DEARBORN, MICH.

Enclosed is \$ _____ for _____ year's subscription to

THE DEARBORN INDEPENDENT

The Ford International Weekly

GIVE COMPLETE ADDRESS—WRITE PLAINLY

Name _____

Street or R. F. D. No. _____

City _____ State _____

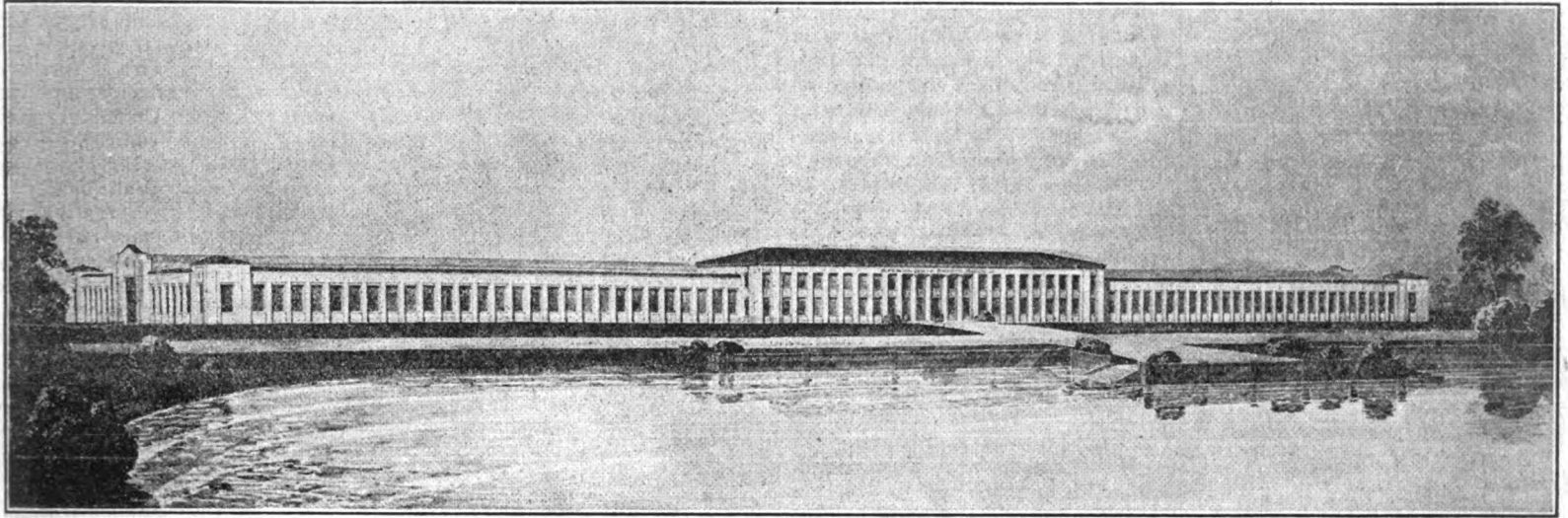
THE SUBSCRIPTION PRICE IN THE UNITED STATES, ITS DEPENDENCIES, CUBA, MEXICO AND CANADA, IS \$1.50 A YEAR. FOREIGN COUNTRIES, SUBSCRIPTION RATES ON REQUEST

Ford News

Volume III. L

Dearborn, Mich., April 1, 1923

No. 11



Ford Motor Company Engineering Laboratory, Dearborn, future home of Experimental Departments and The Dearborn Publishing Company.

More Mines Are Bought

Coal Reserve Amounts to
600,000,000
Tons

Company Purchases 1,000 Coal
Cars to Handle Ford
Product

The recent acquisition by the Ford Motor Company of the Peabody coal properties in Southeastern Kentucky adds another link to the chain of Ford holdings which is rapidly bringing the Company to a point where it will no longer be dependent upon an outside supply for its basic raw materials.

The Peabody properties cover approximately 120,000 acres and include 200,000,000 tons of coal and in addition 500,000,000 feet of timber. This purchase brings the available coal supply of the Company up to the tremendous figure of 600,000,000 tons.

That the Company might have a free hand in the operation of its mines and the shipment and sale of the product, the Fordson Coal Company has been incorporated and henceforth all coal properties will be handled by this Company. The Ford Motor Company recently purchased 1,000 coal cars, of 55 tons capacity each, to handle Ford coal, thus eliminating car shortages which have been such a large factor in holding up production at the mines during the past few years.

The purchase, last November, of the Dex car property at Twin Branch,

Concluded on page 4

Construction Begun on New Ford Engineering Laboratory, Dearborn

*New Record
at Hamilton*

100 Different Ford Parts Are
Now Produced in
Ohio Plant

On March 5 of this year the Hamilton Plant of the Ford Motor Company turned out 7,428 wheels for the 16-hour period. This is a new high record, not only in total number of wheels produced, but also in number of wheels per man per day.

Wheel production at Hamilton is steadily increasing. The present plans are for 7,600 daily for 16 hours.

In addition to wheels the Hamilton Plant is now producing approximately 100 different parts for Ford cars and trucks, chief of which are rear radius rods, running boards, running board brackets, spare tire carriers, battery carriers, fuel tanks, dash weather strips, two and four-door Sedan locks, touring car locks, brake drums, hubs and flanges.

The present daily consumption of steel is around 325,000 pounds and a total of approximately 20 cars are handled daily; of which number 12 to 14 are outbound to the various Branches.

Additional sidetracks and switching facilities are being installed to handle the increasing volume of freight.

The employees at the Hamilton

Concluded on page 8

Distinctive Design Will Mark Advance Step in Modern Industrial Architecture

GROUND was broken March 16 for the Ford Motor Company Engineering Laboratory and Dearborn Publishing Company Building at Dearborn, and within a few days marked progress in the excavation work was noted. The building will, undoubtedly, set a new mark in modern industrial construction.

The structure is designed entirely in accordance with Mr. Ford's ideas. The plans call for a building 200 feet deep and 800 feet long. At the front and facing west there will be an office section 234 feet long by 50 feet deep. This will be two stories high and will provide offices for Mr. Ford and his assistants. Included, too, is space for the Editorial Department and other offices of The Dearborn Publishing Co., whose publishing and job-printing plant will be housed in the one-story part of the building which will be furnished throughout with the most modern equipment.

Externally, the building will also express Mr. Ford's ideas. It will be faced with white limestone. The design is extremely simple and depends for its beauty entirely upon material, the general mass, proportions of openings, piers, cornice, and so on. Some decorative panels will be introduced illustrating the history of locomotion and these will be modeled by one of the best of eastern sculptors. The exterior distinctly expresses the func-

tions of the interior and this most directly.

The interior walls will be wainscoted with a soft, yellow brick some eight feet high, above which the walls, as well as the roof, will be enameled white. Column spacings will divide the interior into bays approximately 40 feet by 50 feet and constructed to provide a maximum amount of light. The light is introduced through a novel scheme of roof design. Heat and ventilation will be provided by fans and the air will be washed. A novel scheme to admit the air has been adopted. A part of the interior columns will serve as ducts which are supplied from below with the heated air, the latter being discharged into the room some eight feet above the floor.

All equipment will be electrically driven and there will be no unsightly shafting. The wiring and all piping will be carried in a basement extending through the entire structure. Herein, also, will be placed all heating and ventilating ducts.

Few have done more than Mr. Ford to bring about the erection of industrial buildings designed not only to benefit the employees but also to appear attractive. Since the erection of his first Plant at Highland Park, Mr. Ford has endeavored to give every structure, no matter for what

Concluded on page 8

Ford News

ESTABLISHED 1926

Issued for the employes of the
various Ford Interests.

Vol. III, No. 13

May 1, 1923

PUBLISHED SEMI-MONTHLY

Motto

A business that is at the mercy of any competitor is a business that has stopped growing. A business that is growing in volume and not in quality is also in danger. And this happens mostly to businesses that started big. It is a great disadvantage to start big, because then you are too big to change and revise and improve as your experience grows. A business that begins at its natural beginning and grows through merit and industry is supple, it is easily able to adapt itself to the very valuable discoveries of experience. It always leaves an open end for new progress, always keeps a place where the new can link hands with the old for greater service. There is safety in small beginnings and there is unlimited capital in the experience gained by growing.

—Henry Ford.

Only a Spark, After All

Little wonder that art is incomprehensible to the ordinary mind, if, as stated by the *Community Herald*, of Denver, "A Divine Spark of Godliness Is Born in the True Artist and Can't Be Acquired." If that be true, it must be there is little of true art in the world, or the spark rarely develops beyond that stage of combustion.

That true art is born in the individual, no doubt the intent of the *Herald's* statement is true, but history can point to no case where development by long and earnest practice has not been necessary. The born artist who fails to study is a failure; he who forgets in private life those things which make for true manhood smothers the talent with which he has been endowed. And this fact is not true in the realm of art alone.

Recharging the Mental Battery

Did you ever think of your brain as a storage battery? Unless this brain-battery of yours is well charged, the human mechanism naturally slows down and becomes inefficient. If it has "balky" spells, if

it refuses to function properly, if there is need for constant "pushing" to keep going, something is wrong. The battery needs recharging. "But how," some one asks, "can this brain-battery be recharged?" The answer is simple. By use. It is a marvelous mechanism indeed that improves with use and deteriorates with disuse, but this is true of the brain. Use prevents stagnation. It keeps the battery full charged all of the time—alive, active, receptive.

Many opportunities are thrown away that could be used profitably to increase the mental capacity.

It is said that if one reads on some subject for only 15 minutes a day, in a year he would know more of the subject than most people he met.

That is worth a trial. You know a dozen subjects you've been intending to look into. Choose one of them today and start in. It may surprise you to discover what a difference it will make in your work and in your entire way of living and thinking.

Why not try this method of charging the brain-battery for just 30 days?

Building for the Future

The giant redwoods of the west were thousands of years attaining their majestic heights.

The vast glaciers of the northern mountains move but a few feet every year, yet through centuries they have gouged great caverns in rock.

The enduring things take time. Inventors spent many years perfecting devices which enlighten this age—but those things last.

The mushroom comes up overnight but soon withers; spring flowers sprout quickly and are gone. Quick crops are soft.

Plan carefully, slowly; build for the future. Remember that which takes you years of effort to attain, will also last you years.

Remember the lesson that nature teaches.

I like to see a man proud of the place in which he lives. I like to see a man live so that his place will be proud of him. Be honest, but hate no one; overturn a man's wrongdoing, but do not overturn him unless it must be done in overturning the wrong. Stand with anybody that stands aright. Stand with him while he is right and part with him when he goes wrong.—Abraham Lincoln.

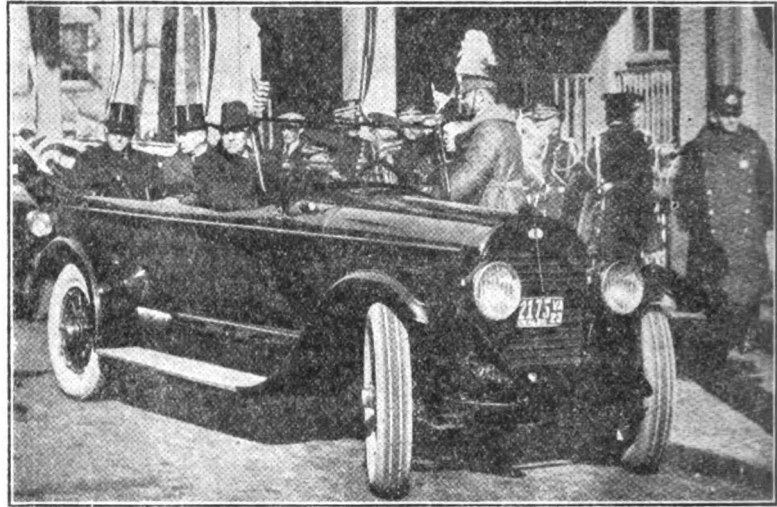
Plant a Tree



I think that I shall never see
A poem lovely as a tree.
A tree whose hungry mouth is pressed
Against the earth's sweet flowing breast;
A tree that looks at God all day
And lifts her leafy arms to pray;
A tree that may in summer wear
A nest of robins in her hair;
Upon whose bosom snow has lain;
Who intimately lives with rain.
Poems are made by fools like me,
But only God can make a tree

—Joyce Kilmer.

Noted Officials Ride in Lincoln



Governor E. Lee Trinkle, Mayor Williams and Albert Sinrot.

More than 7,000 persons participated in the annual parade and celebration at Alexandria on February 22. This is a gala event and one in which the city takes a just pride, Alexandria having been Washington's "home town" and many of its streets laid out by him.

Due to the initiative of the Remschel Motor Company in arranging with the committee in charge, a Lincoln Phaeton was placed at the disposal of Virgin-

ia's popular governor, the Honorable E. Lee Trinkle, for his personal use during the entire day. With him rode Mayor Williams and Albert Sinrot, of Alexandria.

The Lincoln and its distinguished occupants were naturally the center of interest and were viewed by more than 50,000 residents and visitors including government and foreign officials from Washington as well as army and navy officers of high rank.

The Biggest Man

It isn't the man who weighs the most
With his bulk of avoirdupois,
It isn't the man who talks the most
And makes a lot of noise;
It isn't the man who schemes the most
To beat his fellow man,
Nor it isn't the man who owns the most
That's counted the biggest man.

It isn't the one who spends the most
Nor the one who tries to hoard,
And it can't be that genial host
Who feasts you at his board.
It isn't the one who tries to knock
The good that others do,
And it isn't the one who gets a dock
For being late 'tis true.

But it is the one who does his best
No matter where he works,
And freely meets the hardest test
And never tries to shirk;
The one who will not seek revenge
Upon his fellow man,
Or harbor malice in his heart—
He is the biggest man.

—Ernest A. Chapman.

The county commissioners of El Paso County, Colorado, have ordered signboards on public highways of the county removed within 90 days. The signboards are said to obstruct highways, deface the scenery and are dangerous to travelers.

PITHY PARAGRAPHS

Select your object then strive to reach it.—Alfred Lucking.

Assume an ideal then strive for that end.—N. C. R. News.

To have intelligence it not enough—you must use it.—Alfred Lucking.

The man who will lose a friend for a dollar might some day find himself without either.

Even a fish don't get caught if he keeps his mouth shut.—Bastrop Alligator.

When you give your best you can expect the best in return.—E. L. Spencer.

To maintain order, excellence and harmony in the territory immediately under one's own hat will keep one fairly well employed.—The Fuller Bristler.

From this day on I mean to do the best I can. If I am right, time will prove it. If I am not right, 10 angels swearing I am right will not make it so.—Abraham Lincoln.

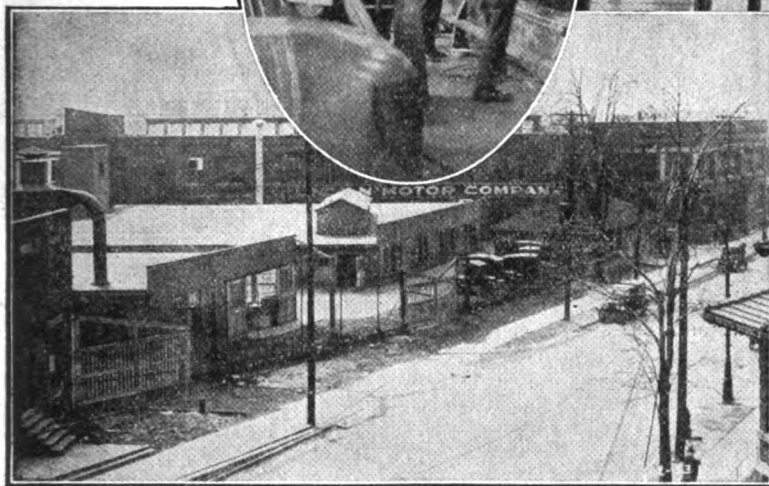
Holden Avenue Body Plant, Detroit, Begins Production on 2-Door Sedan

Strictly Modernized in Every Way; Latest Type of Equipment Is Installed

Further expansion of the Home Plants of the Ford Motor Company took place recently when a building located on the corner of Lincoln and Holden avenues was remodeled for the purpose of turning out two-door Sedan bodies. It is known as the Holden Avenue Plant. When the Ford Motor Company purchased the Lincoln Motor Car Company this building was in-

only product of this Plant. Production demands for this particular type will be entirely supplied from this Plant, completely assembled for the chassis.

in an advantageous location for both shipping and receiving stock. A switch to the main line of the Grand Trunk Railroad enables this to be carried out very easily. The dock accommodates from 10 to 12 cars and adequately meets the shipping demands at present. Three of the city's main street car lines are within two minutes' walk of the Plant.



Oval—Body assembly line. Left—Exterior view of plant. Right—Two-door Sedan bodies receiving final trim on paint line.

The installation of the latest type of ovens, conveyors and working apparatus is practically finished. The heating, lighting and ventilating systems are complete.

Ample protection from fires has been looked after. Besides having a squad of firemen for duty at all times chemicals are distributed about the Factory. Sprinkler systems have been installed in all the buildings and these are fed by a 30,000-gallon tank.

cluded in the transaction but since its purchase has not been utilized by the Company.

Two-door Sedan bodies will be the

The building itself, as well as the equipment, has been modernized in every way. The floor space is approximately 83,000 square feet. It is

Car Door Falls; Injures Worker

Recently a load of ties was to be unloaded from a box car on the Detroit, Toledo & Ironton Railroad. The load had shifted over against the car door crowding it out, releasing the rollers at the top. When the hasp was unloosed the door fell off, seriously injuring one man.

Mr. J. R. Gainsley, one of the live Safety Committeemen of the Detroit, Toledo & Ironton Railroad, after investigating the accident has the following to offer:

"When unfastening a side door of a loaded railroad car be sure to look at the top of the car door to see if door is properly secured, before releasing door hasp."

The old city wall of Canton, China, now serves as a top surface for 28 miles of highway, over which automobiles and motor buses are running.

Burbank Film Explains Wonders of Plant Life

Development of 300 New Plants Shown; Acquaintance With 'Plant Wizard's' Most Famous Species Made

One of the most interesting of the Ford Educational Library Films and one that is a favorite in the school is the Luther Burbank film.

Luther Burbank, the "Plant Wizard," has made flowers more beautiful and food plants yield more abundantly by means of the selection and breeding of the plants.

The film takes the audience on a visit to the Burbank gardens where they walk with him and he explains the different plants he has improved. More than 3,000 plants have been worked on and about 300 new plants have been produced. The film acquaints one with the famous Burbank spineless cactus as well as the many

other varieties of plants so often associated with the name of Burbank.

The method of crossing plants to secure a new variety is shown in an experiment upon the lily. The results of plant breeding have been secured by long observation of plant habits and years of patient experimenting.

Luther Burbank lived, when a boy, in Massachusetts, where he tried sprouting sweet corn in a hotbed and planting the sprouted seed. In this manner he was able to market sweet corn 10 days earlier than usual. One day he found a seed-ball on the vines of an Early Rose potato. He saved

Concluded on page 7

Vacation Tours Speed Up Sales

Connecticut Editors See New Reasons for Sudden Response and Warning

In commenting on the unusually big response to "Don't delay your order" message recently sent out by the Ford Motor Company, the New Haven, Connecticut, *Times-Leader* gives the following as one of the reasons for the marked increase in sales:

"One phase of the response to this appeal is especially interesting, the Company thinks. It relates to prospective vacations and tours now being planned by folks all over the United States. Southern people are ordering Ford cars with which to aid in escaping the hot summer months in Dixieland, and to carry them to cool spots among New England mountains and along the seashore. Westerners are planning to come East—and we of Connecticut and Rhode Island are laying out tours into Canada and elsewhere. Dealers throughout the country report that summertime journeyings, with a new Ford car as the basis, play a unique and important part in this year's heavy advance orders.

"That Ford cars are so generally in demand by tourists is another verification of the old saying that 'Nothing succeeds like success.' And the Ford car as a comfortable means to get about, either on pleasure or business—no matter what kind of road one is obliged to negotiate—is a generally acknowledged success."

4,000-Foot Load Handled by Fordson

The lumbering operations at the Company's camps in the Northern Peninsula of Michigan are greatly facilitated by the use of Fordson tractors. For loading the logs and



hauling them to the points of shipment the tractors have proved themselves indispensable. At the Sidnow camps 4,000 feet of hardwood logs is the ordinary load and is hauled a distance of three miles.

French Inventor at Dearborn Plant

Demonstrating Car That Crossed the Sahara Desert

Run Marks Another Victory in the Automobile Industry, 20-Month Trip Made in 20 Days

M. André Citroën, automobile manufacturer of France, was a recent visitor at the Dearborn Plant. M. Citroën is the inventor and manufacturer of the caterpillar-drive automobile which only a short while ago made a successful trip across the Sahara Desert. Three of his cars equipped with the caterpillar-drive gave exhibitions in hill-climbing.

The caterpillar attachment is the old war tank propulsion applied to an automobile with some refinements. They can easily climb grades of 45 degrees.

Five cars thus equipped set out

from Touggourt, Algeria, across the Sahara in the direction of the French Sudan and Timbuktu. The motor caravan finally emerged from the scorched sands of the Sahara at the Niger River 20 days later having covered 2,200 miles. In 20 days it had traveled a distance that the camel caravans would have taken as many months to cover.

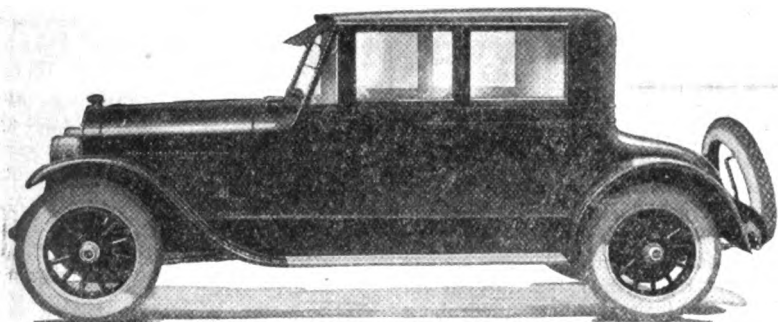
The speed average under the worst conditions was about 10 miles an hour.

Branch Display of Service Equipment Aids Dealers

Cambridge, Massachusetts—At the recent automobile show the Branch sponsored a unique display for the benefit of the various Dealers. It proved to be a real educational affair. Three of Boston's largest service equipment companies were asked to display their latest devices at the show. All were combined in one room. For Dealers who were anxious to have an up-to-date service it was a big benefit and no doubt will be carried out by other Branches.

New Lincoln Models

Concluded from page 1



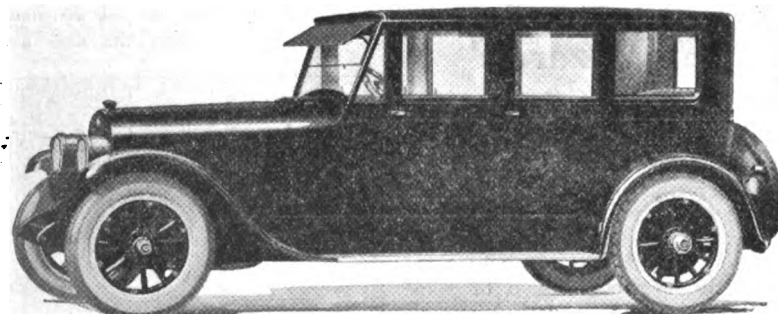
New five-passenger Lincoln Coupe.

cupants and there are besides, two emergency seats which face backward.

Everything has been anticipated in appointments. A dainty vanity case on the left side of the rear seat contains mirror, cardcase and notebook all of exquisite design, while oppo-

site on the right-hand side is a cigar

lighter and ash receptacle, with an additional cigar lighter on the dashboard. Illumination for the interior comes from a dome light and quarter lights operating from tumbler switches on either side of the door frame. The dropping windows are easily



New five-passenger Lincoln Sedan.

site on the right-hand side is a cigar lighter and ash receptacle, with an additional cigar lighter on the dashboard.

Illumination for the interior comes from a dome light and quarter lights operating from tumbler switches on either side of the door frame. The dropping windows are easily

monizing in the general color scheme.

Bodies are mounted on the standard Lincoln 136-inch wheelbase chassis which insures easy riding and the utmost in performance, so, whether the distance be long or short, the weather pleasant or inclement, the occupants at all times travel in the most luxurious comfort.

Hospital Has Ideal Bakery

The bakery at the Henry Ford Hospital is operated in connection with the main kitchen, and is so situated that no odors from the baking

landed tables, steam jackets, tilting kettles and in fact all other necessary modern conveniences. The general layout is such that additional equip-



Henry Ford Hospital bakery. Note Ford Flour which is used exclusively.

may penetrate to the buildings occupied by the patients. Being located on the ground floor, it is well lighted and ventilated.

The bakery is well equipped with three units of electric ovens of three ovens each all faced with white tile dough trough, dough-mixing machine, proofing oven, Monel metal cabinets with bins for Ford Flour, which is used exclusively in the hospital, and shelving above for extracts, spices, and so on, Monel metal dough and

ment may be installed at any time to increase the capacity.

The present daily production is approximately 90 loaves of assorted breads—Boston brown bread, Lister bread for diabetics, bran bread, graham bread, salt-free bread, corn bread, and rye bread, 40 pies, also a large variety of cakes, cookies, biscuits, rolls, puddings, ice creams and ices are a part of the daily routine. It is possible to gratify each individual patient's desire for any certain dessert.

Noted Doctors Inspect Ford Hospital

Japanese Medical Men Entertained at Luncheon

Recent visitors at the Henry Ford Hospital were Dr. Fujinami, professor of pathology and pathological anatomy, faculty of medicine, Kyoto Imperial University, Japan; Dr. Nagayo, director of the government institute for infectious diseases, professor of pathology, Tokyo Imperial University, and Dr. Hata, professor of medicine at Keio University.

Arrangements for this visit were made with the Henry Ford Hospital by the Rockefeller Foundation.

At the present time there is a group of six noted Japanese doctors visiting the various medical schools, hospitals and health organizations in the United States.

The doctors were entertained at a staff luncheon at the hospital and spent the afternoon inspecting the various hospital units.

Fair Play Is Motive

Concluded from page 1

Edsel Ford that an extra-legal view of the matter was taken, and an additional \$4,000,000 laid out for the sake of preventing loss to those who had actually provided material for the Lincoln Factory. As a stabilizing act and as a sign of the substantial basis on which the motor industry rests, it has gone through the country with a great leap, teaching business men everywhere the solid worth of morality in business and proving that sound methods of management mean gain to all and loss to none.

El Centro, California—Edgar Brothers Automobile Company have been highly congratulated for the model farm display they exhibited in their window recently. Employees of the Dealer made each part of the display. One day was taken in arranging it in the window. A bed of soil about an inch thick was put in the window in which was sown alfalfa. Included in the display were a miniature farmhouse, garage, barn and yard with farm animals.

Company's New Glass Plant at Glassmere

Concluded from page 1

requirements, the Company recently purchased the Allegheny Plate Glass Plant located at Glassmere, Pennsylvania, 18 miles out of Pittsburgh, in the heart of the largest glass-producing section in the United States. The property covers 60 acres with approximately 300,000 square feet under roof.

This new unit in the Ford equipment is one of the finest manufacturing facilities of large plate in the world.

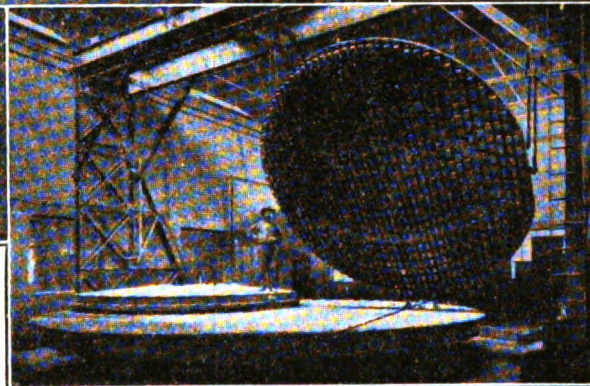
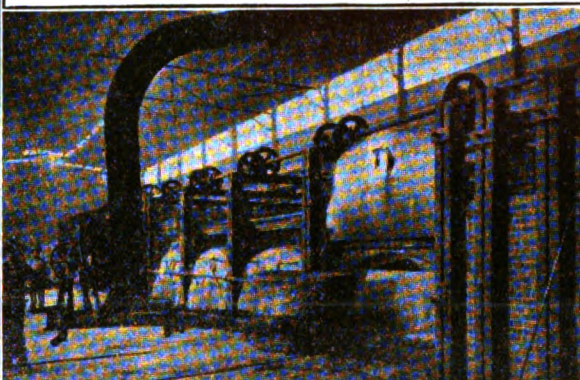
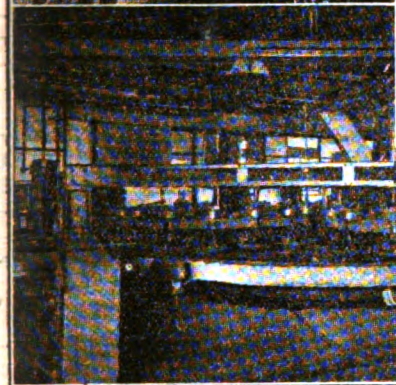
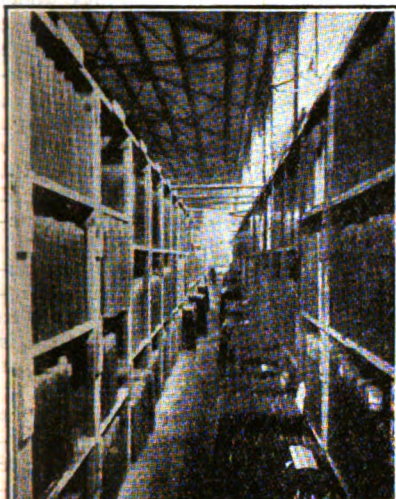
pots and each pot of glass metal pours 300 square feet of rough plate. The furnace temperature is 2,600°F. The pot remains in full furnace heat for 16 hours. It is removed with a "gooseneck" crane and conveyed directly to the Casting Department. Here, after the metal is skimmed and the pot thoroughly cleaned, it is carried by crane to the casting table on which it is poured and rolled. The plate is then automatically pushed into the first annealing oven. All these steps are controlled by a single operator who handles nine distinct operations. This electrical installation is said to be one of the finest in the country. The plates are stowed in five annealing ovens, graduating the temperature from 1,160°F. to 900°F. They are then passed through alehr or oven 365 feet long, emerging

emery, drawn by the operator from overhead containers.

The grinding of one side of the plate having been completed, the table is then conveyed to the polishers. The polishing machine gives the final gloss to the finely ground surface. It consists of a large number of rapidly revolving felt blocks, resting on the surface of the turning deck. Liquid rouge is fed to the table at the center and gives the desired finish. Inspectors examine the surface thoroughly after every polishing operation. If their examination proves the finish to be satisfactory, the deck goes to the stripping yard. There the plates and decks are cleaned, and the glass turned over for grinding the other surface.

After the final polishing the plates are washed and dried. An inspector notes defects and marks the plate for cutting, grade and destination.

Once again comes the crane, lifting the plate to tables where the cutting is performed with rough diamond tools. All the cutting tables can be tilted hydraulically from the horizontal to



Upper, left—Ware room where plates are stored according to size, grade and use. Lower, left—Polishing machine which gives final finish to plates. Upper, right—Gooseneck crane removing pot of molten glass from furnace. Lower, right—Under surface of grinding blocks, showing small iron shoes.

having electrical machinery throughout, and its output having been in large demand wherever the highest quality plate glass is used.

Although the complete output of the Plant is 7,000,000 square feet annually this represents but one-third of the annual requirements of the Ford products. And as most of the previous output of the Glassmere Factory was used in the automobile industry, no radical changes in the manufacturing methods will be made at the present time.

Glass making, as carried on at Glassmere, is marked by the most careful selection and preparation of the ingredients that are charged into the furnace. The furnace contains the empty clay pots into which the "batch," as it is called, is poured by an electrically controlled arm or dipper on a crane. Each furnace holds 16

with the temperature lowered to 200°F. when they can be handled. From here they are carried to the cutting tables and then to the rough plate racks.

The next step is the grinding and polishing. This is done on circular decks or tables, to which the plate is conveyed by the crane system.

Along both sides of a long room are the seven grinding and seven polishing machines which are served by two electric car lines.

The under surface of the grinding runners, which work on revolving decks, consist of small iron shoes, between which the abrasives run. One of these runners weighs 8,000 pounds, making a total of 16,000 pounds grinding pressure on one deck of glass.

Seven distinct grades of abrasive are used, from coarse sand to fine

the vertical position and back. This places the plate on edge after cutting; the crane takes it to the traveling racks where it is conveyed to the ware rooms, where another crane system sorts and stores the plates facilitating the selection, packing and loading for shipment.

One additional grinder and one polisher are under construction. When these are completed, the Plant will have three rounded-out units—that is, eight furnaces, eight grinders and eight polishers.

The Plant employs about 500 men. The Ford scale of wages has been made effective and the Investment Plan put into effect. The Company has a fully equipped hospital unit but owing to the labor-saving machinery and the strong insistence upon the Safety First principle, the accident list is small.

Ford Hospital Establishes Record

New Patients Average 32 a Day During March

Remarkable Growth Shown; Institution Becoming Known Throughout the World

During March, 1923, more patients were cared for at the Henry Ford Hospital than in any other month since it was opened by Mr. Henry Ford, on February 1, 1915.

During March the daily average number of patients in the hospital was 199.1. This is a remarkable growth considering the fact that on January 1, 1922, the hospital had accommodations for but 72 patients. With new equipment arriving during 1922 and the gradual movement into the new hospital building, new rooms have been opened which now permit

On Thursday morning, April 19, there were 223 patients in the Henry Ford Hospital, which is the record number of patients in the hospital since its opening in 1915.

the hospital to handle three times as many patients as were handled 15 months ago.

During March, 821 patients who had never been to the hospital before came for physical examination and advice. The fact that an average of 32 new patients came to the hospital every week day during March for physical examination shows that the general public is becoming educated to the policy of a thorough examination at regular intervals.

During the same period there were 518 patients admitted to and 542 patients discharged from the Inpatient Department, and there were 7,794 patients who came to the hospital for office visits.

It was necessary to have an average of 467 employees to handle the work connected with these patients.

The Henry Ford Hospital continues to grow month by month, and is becoming better known throughout the world. Scarcely a day goes by but that some person or group from some part of the United States or from foreign countries stops at the hospital to inspect it and to marvel at the completeness of its appointments.

Few young men are really determined to succeed. Determination is the great factor in success. One must be willing to work hard, be patient, keep a cool, level head and make sacrifices. There is so much room at the top that the men already there feel lonesome.—John G. Shedd.

Consolidated School Uses Ford Trucks Economically

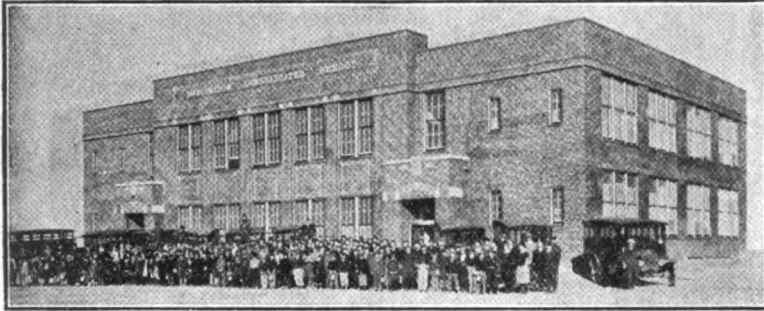
Most Efficient Way Says the Board of Education

Children Travel Ten Miles to Attend School in Burlington, Oklahoma

With the erection of a large consolidated school at Burlington, Oklahoma, came the question of transportation. Many of the pupils had to come a distance of 10 miles. The

given their entire approval of an installation which has proved safe and efficient as well as a money-saving factor as indicated by the low tax rate.

The average cost for transportation is 10 cents a child per day and each truck will accommodate from 25 to 30 children. The chassis were purchased by the individuals to whom the contracts for the transportation were let and the bodies were built and maintained by the school. During the summer the chassis were used by their



Nine Ford trucks carry this group of children to school each day.

transportation must of necessity be reliable as well as economical.

The solution was finally reached by the purchase of nine Ford chassis on which were built bus bodies. With this equipment approximately 250 children are taken to and from school each day. Eight of these trucks have been in use since the autumn of 1921.

The Board of Education is well pleased with the performance of the Ford trucks and the taxpayers have

owners for other work, thus keeping them in service the year round, and, according to one of the directors, they are in splendid running order.

The consolidated school is proving a satisfactory solution to the rural school problem and such schools are springing up all over the country and it is safe to say that the Burlington school is not the only one that has found in the Ford truck an efficient means of transportation.

Fordson Hauls Feed for Dobbin

Wherever the Fordson has touched a transportation problem a decided economy has been the result. No better illustration of this fact can be had than that of a large grain and feed store in Cincinnati.

This firm has been in business for many years and has known the use of the slow-plodding teams of oxen. Then came horses hauling the heavy drays. These, in turn, gave place to the more efficient motor truck which is now supplemented by the

Fordson. The tractor more readily adapts itself to short hauls, is more easily loaded and unloaded and is much more economical to operate.

In addition to this, when not actually used for hauling the product, it can be put to a score of other uses.

The versatility of the tractor appeals to the commercial and industrial user. Lending itself, as it does, to a wide range of work, it never becomes an idle investment.

A Million Wheels Built at Hamilton Plant

On March 26 the Hamilton, Ohio, Plant turned out the one millionth wheel. Hamilton has been setting some exceptional production records recently in the manufacture of wheels. In addition to wheels this rapidly growing plant turns out approximately 100 different parts for the car and truck.

Radio Station Is Operated by Fordson

Island People Kept in Touch With Rest of World

The performance of the Ford car under all circumstances has long been a matter of well-earned fame, but its younger brother, the Fordson, is no less versatile. The wonderful little tractors have for years been used on the Isle of Pines to pump water, to run the machinery of packing houses and coloring plants, and now one of them is transmitting power from the Harris Garage to the Cuban Government wireless station.

For two weeks that little tractor has been generating direct current and transmitting it to the wireless hut where it is transformed by the motor generator into alternating current and stepped up to the 2,000 volts used in radiation, and the people on the Isle of Pines owe it to the Ford Dealer that communication has been maintained with the outside world while the machinery of the wireless plant has been undergoing repairs.

—Isle of Pines Appeal.

Houston, Texas—The Armour Branch of the Ford Motor Company recently completed equipping an amusement concession traveling through Mexico with Ford tractors. Three Fordsons were purchased by the amusement company. One will be used entirely for operating a merry-go-round while the other two will do the heavy hauling.

It is what we do and what we think that makes up what we are.—N. C. R. News.

Matches Cause Heavy Fire Loss

Latest Figures for 1921 Show \$25,992,033 Damage

Decided Reduction in Company Loss Is Due to the Safety Organizations

The leading fire causes for 1921 were matches used by smokers. The loss attributed to this cause alone amounted to \$25,992,033. The next cause was spontaneous combustion with a loss of \$20,186,392. Next in order was defective chimneys and flues with a money loss of \$14,801,581. Stoves, furnaces, boilers and their pipes caused a loss of \$13,910,521. A total of 15,000 lives are sacrificed to the flames each year in this country.

It requires no expensive machinery or elaborate precaution to prevent the huge loss attributed to matches and smoking. All that is needed is a moment's carefulness when handling a match.

An explosion in the Gas Light Company's Plant at Springfield, Massachusetts, on February 1, caused the death of three persons, fatal injuries to two others and serious injuries to 50. The property loss amounted to nearly \$1,000,000. Property adjoining the Plant was seriously damaged by the flash.

Since the organization of Safety and Fire Prevention committees at the Ford Motor Branches a marked reduction in fires has been experienced. Fire teams have been organized and many operations have been changed to reduce the fire risk.

Many small explosions have occurred, due to the failure of some workmen to shut off gas valves on their furnaces before going home at night.

Do not depend on the main shut-off, but be sure to close the individual valves before going home.

An experienced chauffeur in China receives between \$12 and \$15 a month.

In South America, Brazil has a motor vehicle for every 1,497 persons! Argentina, one for every 296, and Chile, one for every 455.



Farmers' Meeting and "Ford Day" Combined

Gatherings Promoted by Milwaukee Branch

More Than 40,000 Total Attendance at 65 Meetings Held During 1922.

The importance of Farmers' Meetings, as a means of reaching the residents of the rural sections, is fast becoming apparent. More Branches and Dealers have held such meetings

persons. At many meetings 1,400 were present.

Whenever possible the meetings are held in connection with a "Ford Day." The merchants usually participate willingly, benefiting by the large crowd. Special sales are put on and prizes offered for almost every conceivable event in which a Ford could participate from the one most beautifully decorated to the oldest and most dilapidated one. Such prizes are awarded at the meeting.



Creating a spirit of good will at Janesville, Wisconsin; 1,200 in attendance.

this year than ever before, and what can be done in the way of making them pre-eminently successful is well exemplified by the Milwaukee Branch.

The Farmers' Meeting is by no means an innovation with them. Last year 65 meetings were held with a total attendance of more than 40,000

The programs given at these meetings vary to meet conditions. Usually good speakers are provided. The subjects of their talks are such that an interest will be aroused in the Ford Motor Company and its products. A discussion of farmers' costs is very often presented. Existing conditions demand that the farmer

become a better business man, that he be keenly aware of the economic problems which face him. Of course, the solution to these problems is Fordson farming.

In addition to the speakers there are shown some interesting film subjects such as "Four Seasons With a Fordson" including a good comedy. A 10-minute talk on The Dearborn Independent is a feature of every meeting.

These Farmers' Meetings have been enthusiastically received throughout the Milwaukee Territory and the country newspapers have given much publicity in every case. Probably no effort on the part of the Ford Branch and Dealer organizations can create a greater feeling of friendliness and good will than this meeting together with the farmers and their families.

Signboard Gives Auto Drivers Pause

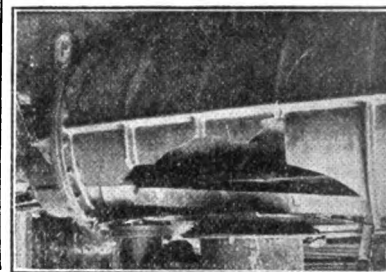
A striking signboard, posted on the road near a schoolhouse in West Palm Beach, Florida, reads, "Obey the Law—Don't Kill a Child." Underneath the caption is the picture of a traffic officer escorting school children across a crowded street.

Kansas loses from \$300,000 to \$400,000 a year from motorists who refuse to obtain state licenses or who obtain fake license plates.

Japan is the leading motor market of the Far East. It leads not only in consumption of motor vehicles, but in potentialities.

Shutting off Gas Prevents Explosions

An explosion recently occurred in an air blower seriously injuring one man. The air blower is connected with the furnaces by galvanized



pipe. A gas line joins this pipe at the furnaces and the mixture of gas and air is released through the burners. The check valve in the air line did not function properly and when the blower was shut down, the gas, which was not shut off, flowed through the air line to the burner, resulting in the explosion, the severity of which was diminished considerably by the paper seals in the air line.

Briefly stated, the following precautions should be observed at all times in connection with furnace operation: Shut off the gas when air pressure is low or when gas is not in use. Also be sure safety explosion seals (blanks) are on all air lines and blowers used in conjunction with gas.

Burbank Film Explains Wonders of Plant Culture

Concluded from page 3

this potato seed and from it grew 23 hills of potatoes. One hill produced potatoes of large size, smooth and of fine quality. These seed potatoes he sold for \$125 and the seed-man named it the Burbank potato. With the money from the potato sale, Mr. Burbank went to Santa Rosa, California, in 1875.

After a long struggle, Mr. Burbank finally overcame all obstacles and established his ideal experimental garden at Santa Rosa. Later he found need of a larger experimental farm which was located at Sebastopol, eight miles from Santa Rosa.

At Santa Rosa on a small plot of ground, Burbank has hundreds of different kinds of plants growing for experimental purposes. Plants have been imported from every country in the world. It is said that a greater variety of useful plants grow in Burbank's garden than in any other place in the world.

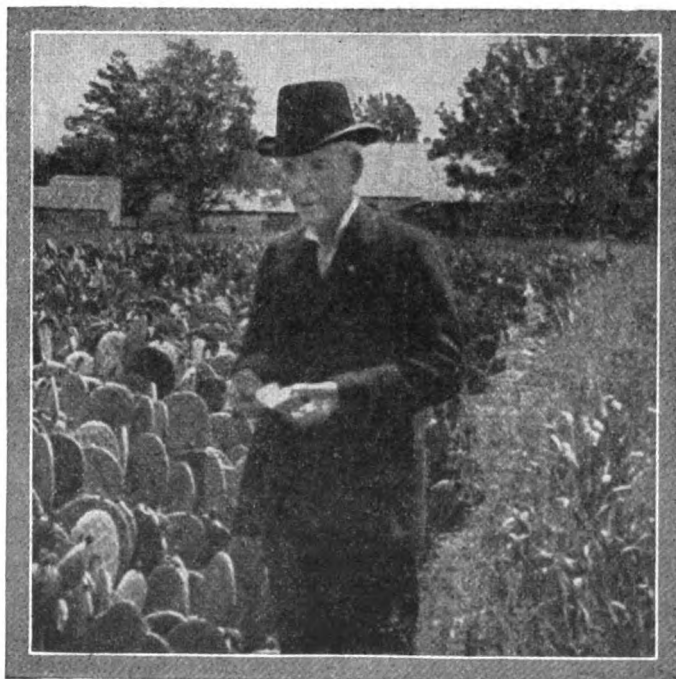
The improvement of wheat has been the work of Mr. Burbank for more than 10 years. After 11 years of patient experimentation, Mr. Burbank has improved the wheat, so that it is an early hard white wheat which is suitable for colder climates. This wheat grows with great vigor and its head, as shown in the film, is very

full and the grains are plump and well formed. It has taken many prizes in the wheat-growing regions

of Canada. It has shown great superiority in milling, and the seed has been sold for more than \$4,000 a

bushel. This wheat will add more than 500,000 bushels to the crop of the United States.

Mr. Burbank accomplishes these wonderful results in plant creation by crossing different varieties. The method is very simple and is clearly shown in the experiment upon the lily. The flowers are prepared as demonstrated in the different scenes. The yellow pollen is taken from the stamens and transferred to the stigma of the pistil of a different flower. This flower is carefully covered with a paper bag and the new seed develops. The new seeds are planted and watched carefully for new varieties. Mr. Burbank estimates that about one-half of the crosses are successful, but it varies for different plants. After the seeds are planted and the new plant matures, the grower selects the plants which he wishes to produce. The remainder are destroyed. Mr. Burbank always astonishes his neighbors when he selects only a few of the new plants and burns the remainder. It requires great patience to cross plants, and much care is necessary in selection, but it is by this method that the results have been obtained.



Luther Burbank and his world-famous spineless cactus.

Another Unit at Ford Hospital Opened

581 Patients Admitted During Month of April

On Saturday morning, May 4, there were 245 patients in the Henry Ford Hospital, a new high record for all time. Due to the increase in patients the hospital has opened another group of 24 rooms which gives accommodations for 253 adult patients.

With the remarkable growth the hospital has had in the past, the probabilities are that the entire hospital buildings will be fully occupied by patients in another 12 months.

While in March, 1923, the Henry Ford Hospital handled more patients than in any other month in its history, April shows an improvement over March.

In April the average number of patients in the hospital was 210.2 as against 199.1 in March. During April there were 581 patients admitted to and 522 patients discharged from the hospital, and 854 patients who previously had not been at the hospital for treatment were registered for general examination.

Private System Country's Largest







Concluded from page 1

possible before transferring them to the commercial telegraph companies. This method not only improves the telegraph service perceptibly, but also shows a decided decrease in the telegraph expense.

The Branches having private wire service exchange telegrams among themselves with no expense whatever. Heretofore this service was performed by the commercial companies.

Cablegrams to Foreign Branches and foreign companies are transmitted to the New York City Office over the private wire, where they are filed direct with the cable company. This has improved the cable service considerably, in addition to saving six cents a word telegraphic charges between Detroit and New York City.

In short, the private wire system has not only increased to a marked degree the efficiency of the service, but has reduced appreciably the long distance tolls between the Home Office and the connecting Branches.

In working around your garden and yard this Spring, don't leave your  and  lying around like this,  or this, . If you do, this is liable to happen,  or  this. Leave them this way, or this, .

Fire Losses Preventable

Education Necessary to Avoid Great Waste

Fire prevention deals with the avoidance of fires. In its usual application fire prevention has reference especially to the safeguarding of buildings and their contents from destruction by fire. However, it applies also to preventing fires in mines, forests, plains and farms.

It is obvious that the study of fire prevention begins with identification of the sources of fires. Even a highly inflammable object will not burn unless it is in some way set on fire. In the case of buildings the foundation of efficient fire prevention is in fireproof construction.

School children should be taught the danger of fires. The children should be taught to inspect their own homes see to the safeguarding of matches; the protection of all wood in close proximity to stoves, stovepipes, furnaces and other means of heating. They should also see to the elimination of accumulations of rubbish, the providing of safe receptacles for hot ashes, and so on.

Statistics are tiresome but compared with leading European cities, the American per capita loss by fire is approximately ten times as much; while the number of fires per thousand population shows a frequency nearly five times as great. The figures given above relate only to the direct fire loss and do not take into account the cost of maintaining expensive fire departments and other facilities for extinguishing fires made necessary by the greater frequency and destructiveness of fires in America. Nor does this take into account the huge indirect losses resulting from fires, such as demoralization of business and loss of profits.

The great waste represented by destructive fires represents an irrecoverable loss in every instance, since insurance does not serve to replace but simply shifts the distribution of fire waste. The consuming public in the long run must bear this loss in the form of increased prices for goods and services and increased rentals. A large part of the extraordinary waste caused by fires is preventable and it is very difficult to educate the American people to change their careless and irresponsible habits in this important matter.

Preventable fire is more than a mere private misfortune; it is a public dereliction. At a time like the present, when conservation of resources is uppermost in the public mind, it is more than ever a matter of deep and pressing consequence that every means should be taken to prevent this enormous waste.

May Radio Programs

Concluded from page 1

be found on page 8 of each issue of Ford News. We trust this will prove convenient for reference.

Effective May 16, WWI will begin their programs at 8 p. m., Eastern Standard Time, instead of 10 p. m., as heretofore. In accordance with the new government regulation, effective May 15, a new wave length of 273 meters will also be adopted.

May 16, 1923

Piano Solo—Miss Helen M. Taschner

Baritone Solos—*The Forest King*, by N. Harris Ware. *Tatters*, by Gerald Tane. Mr. Harry G. Funk, accompanied by Mrs. H. G. Funk at the piano.

Reading—Verses from *Ballads of a Bohemian*, by Robert Service, Mr. Harry B. Elliott.

Violin Solo—*Thais Meditation*, Mr. Frank J. Taschner, Jr., accompanied by Miss Helen M. Taschner at the piano.

Baritone Solos—*On Berrow Sands*, by Stephen Adams. *Crying for You*, by Ned Miller and Chester Cohn. Mr. Harry G. Funk, accompanied by Mrs. H. G. Funk at the piano.

Reading—*The Pencil Seller*, Mr. William Kauffman.

Violin Solos—*Red Moon*, *Lady of the Evening*, Mr. Frank J. Taschner, Jr., accompanied by Miss Helen M. Taschner at the piano.

Health Talk No. 61—*The Psychology of Illness—in Relation to Peptic Ulcer*, Dr. J. G. Mateer, of the Henry Ford Hospital.

Readings—*It Is Later Than You Think*, *Moon Song*, Mr. Harry B. Elliott.

Violin Solos—*Berceuse*, from *Jocelyn*, *Through the Night*, Mr. Frank J. Taschner, Jr., accompanied by Miss Helen M. Taschner at the piano.

May 23, 1923

Orchestra Selection—*Runnin' Wild*, John Henkel, Jr.'s Orchestra.

Boy Soprano Solo—*Faded Love Letters*, Mr. Norman Herr, accompanied by Mr. Harold Herr at the piano.

Radio Talk No. 62—*Safety Talk*, Mr. R. Shaw.

Contralto Solos—*Wake Up*, by Phillips. *Still Unexpressed*, by Carrie Jacobs Bond, Mrs. Edna Riecks Dawe.

Orchestra Selections—*Annet Haggert's Blues*, *You Tell Her*, *I Stutter*, John Henkel, Jr.'s Orchestra.

Boy Soprano Solo—*Pal o' Mine*, *Carolina Lullaby*, Mr. Norman Herr, accompanied by Mr. Harold Herr at the piano.

Radio Talk No. 63—*Health Talk*, *Gall Bladder Disease*, Dr. J. K. Ormond, Henry Ford Hospital.

Boy Soprano Solo—*I'll Give You Back Your Kisses*, Mr. Norman Herr, accompanied by Mr. Harold Herr at the piano.

Orchestra Selections—*Farewell Blues*, *Some of These Days*, John Henkel, Jr.'s Orchestra.

Contralto Solo—*One Sweetly Solemn Thought*, Mrs. Edna Riecks Dawe, accompanied by Mrs. Norman Giles at the piano.

May 30, 1923

Baritone Solo—*Stars and Stripes*, *Red, White and Blue*, by Edward McHugh, Jr., Mr. Frank Morgan, accompanied by Mr. Rowland Hilliar at the piano.

Violin Solo—*Scottish Airs*, Mrs. David Park, accompanied by Mrs. William Stein at the piano.

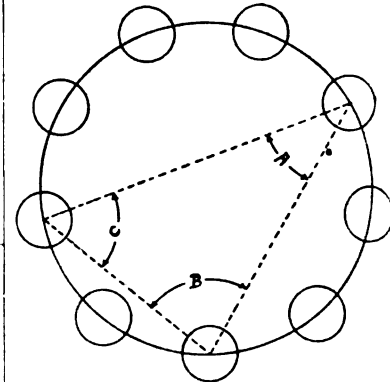
Hungarian Flute Solo—*Hungarian Folk Song*, *Mighty Lak a Rose*, Mr. E. J. Farkas.

Problems

If there are explanations or comments regarding problems, write the Henry Ford Trade School, Ford Motor Company, Detroit, Michigan.

Solution to last issue's problem:

No. 59



DETERMINE ANGLES A, B AND C. AN ANGLE INSCRIBED IN A SEGMENT, IS MEASURED BY ONE-HALF ITS INTERCEPTED ARC. THEREFORE:

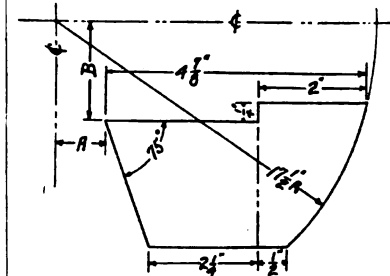
$$A = \frac{1}{2} \times 360 = 40^\circ$$

$$B = \frac{1}{2} \times 360 = 80^\circ$$

$$C = \frac{1}{2} \times 360 = 60^\circ$$

Try This

No. 60



DETERMINE A AND B.

Baritone Solo—*The Trumpeter*, Mr. Frank Morgan, accompanied by Mr. Rowland Hilliar at the piano.

Radio Talk No. 64—*Health Talk*, *The Psychology of Illness—Hay Fever*, Dr. Frank R. Menagh, Henry Ford Hospital.

Violin Solo—*Cavalleria Rusticana*, Mr. David Park, accompanied by Mrs. William Stein at the piano.

Baritone Solo—*Wayfarer's Night Song*, words by Helen Taylor, music by Easthote Martin, Mr. Frank Morgan. *Trifles*, words by Caroline L. Sumner, music by Frank H. Grey, Mr. Frank Morgan, accompanied by Mr. Rowland Hilliar at the piano.

Hungarian Flute Solo—*Falling, Old Kentucky Home*, Mr. E. J. Farkas.

Violin Solo—*Traumerci*, Mr. David Park, accompanied by Mrs. William Stein at the piano.

Women of Los Angeles have instituted a movement to lift the standard of daily newspapers in Southern California. They urged the elimination of "bannering" in heavy type across first-page stories of tragedy and crime.

Ford News

Volume III. L

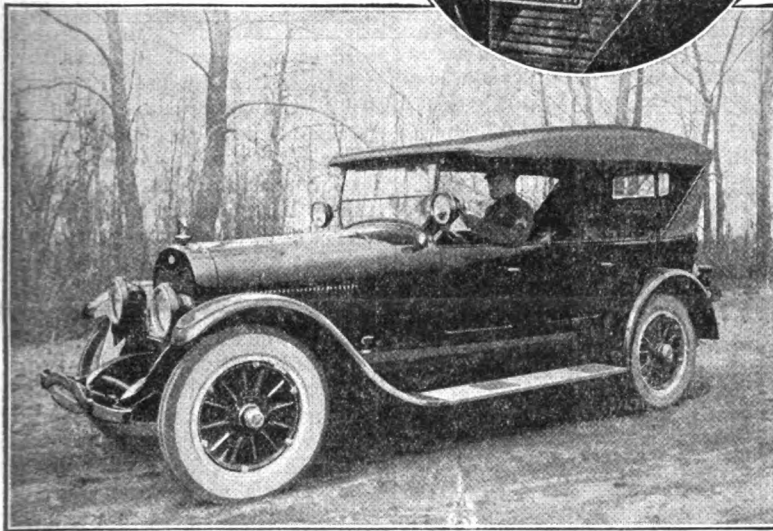
Dearborn, Mich., May 15, 1923

No. 14

State Police Praise Lincoln

An automobile must possess more than beauty in line and distinctiveness in design if it is to meet the exacting demands of the public. It must be capable of rendering satisfactory service under the most trying circumstances. Another triumph of the Lincoln is recorded in the grilling test given the Lincoln touring car which is being used by the Michigan State Police Department.

The car was purchased in June,



Driven 50,000 miles under most trying conditions; this car stood every test.

1921, and was driven more than 50,000 miles before being overhauled. The commissioner pays the highest tribute to the Lincoln. "It is," he declares, "the best balanced, easiest handled and best car I know of. I look forward to an-

other 50,000 miles of good service before it needs any further attention."

Confidence, inspired by long and faithful service, is the best recommendation and no service could be more exacting than that demanded of this car.

Record Broken Week of May 8

New production records were established by the Ford Motor Company for the week ending Tuesday, May 8, during which a total of 39,053 cars and trucks were turned out for domestic use. This exceeds by 192 the previous high record set the week before.

Daily production records went to a new high mark Wednesday, May 9, when 6,615 cars and trucks were assembled, beating the record of 6,590 established on Friday, May 4.

Fordson tractor production for the week ending April 17 was 2,578.

During the same week the Lincoln Division of the Ford Motor Company produced 176 Lincoln cars.

Variety Offered in May Concerts

WWI to Change Hours; New Wave Length Adopted

The popularity of the Ford Radio Programs has increased tremendously. Requests have been received repeatedly that we publish the programs in advance for the benefit of our listeners-in far and near. These requests have recently become more numerous and insistent. It gives us pleasure, therefore, to announce below the WWI programs for the three succeeding weeks, May 16, 23 and 30. Hereafter the radio programs for two or three weeks in advance will

Concluded on page 8

Disabled "Vets" Offered Relief at Ford Hospital

Difficult Government Regulations Are Overcome; Dependents to Be Cared for

An interesting event occurred at the Highland Park Plant when Alvin M. Owsley, National Commander of the American Legion, and Edsel Ford, President of the Ford Motor Company, spent the morning together viewing the Plant and informally discussing the plight of the American ex-service men. Mr. Henry Ford joined the party during the discussion.

Private System Largest in Country

Company Telegraph Lines Cover Large Territory

Increase in Efficiency of Service and Reduced Tolls Mark Installation

Three years ago only two telegraph wires ran from the Ford Motor Company into the local commercial Western Union and Postal Telegraph companies' office. Today the Ford Telegraph System is one of the largest private telegraph systems in the country. Private wire service is maintained with nine of the most important branches, namely: Chicago, St. Louis, Cleveland, Pittsburgh, Cincinnati, Hamilton, Buffalo, New York City and Kearney, New Jersey. In addition, there is private telegraph service between the Highland Park and River Rouge Plants, and also between the Highland Park Plant and the Radio Station at Dearborn. This Radio Station, in turn, connects with the Northville Plant and the Detroit, Toledo & Ironton Railroad Office at Springfield, Ohio.

In addition to this service, there is a telegraph wire between Highland Park and Springfield, Ohio, which connects with every station between Highland Park and Springfield on the Detroit, Toledo & Ironton Railroad.

The private wire service has not only improved the telegraph service, giving practically instantaneous service between the home office and the connecting Branches, but has also decreased the enormous telegraph expense which was heretofore paid to the commercial telegraph companies. Telegrams are handled to points not reached by the private wire system over the private wires as far as is

Concluded on page 8

Upon hearing the distress caused by difficult government regulations which have not yet been changed, Mr. Edsel Ford immediately proposed a further meeting with Dr. Harkness, State Commander of the American Legion, and the result was that arrangements were completed between the Michigan branch of the American Legion and the Henry Ford Hospital whereby Michigan World War veterans who were wounded or disabled and who, because of government regulations, cannot be treated in government hospitals will be treated in Henry Ford Hospital without charge.

All Michigan World War veterans who have any disability that is related in any way to their war service and because of government regulations have been denied treatment in one of the many government hospitals may have such treatment at the Henry Ford Hospital provided they are recommended to the hospital by the Welfare Office of the American Legion, which office is located at 333 State street, Detroit, Michigan.

It was definitely agreed upon that the following types of patients would not be accepted at the Henry Ford Hospital for treatment: contagious, tubercular or mental patients, as the hospital is not treating this type of patient at the present time.

Due to the fact that ample legislation to relieve the present acute situation is gradually being passed by the National Congress, it was agreed that the present arrangement should continue in effect until December 31, 1923, at which time the whole matter would be subject to further discussion. If at that time necessary legislation has not been passed by the National Congress to afford hospitalization to ex-service men in government hospitals, it is understood that the agreement will be renewed for another definite period.

All of the veterans to receive treatment at the Henry Ford Hospital are taken in in the same manner as the private patients, and are

Concluded on page 4

Ford News

ESTABLISHED 1920

Issued for the employees of the
various Ford Interests.

Vol. III, No. 15

June 1, 1923

PUBLISHED SEMI-MONTHLY

Motto

When birds fly north, and when people migrate from one continent to another, and when men leave one form of labor for another, look at the fact of it before you let anyone fill you with the fear of it. There is a great migratory movement from the farm to the city, but it does not mean what the alarmists say it does. It means that the farm "overhead" in men is decreasing. The Farm is the only institution that has fully supplied the world with its product. There is Food enough, but there are not manufactured articles nor Transportation enough. When Industry and Transportation have supplied the world as well as Agriculture has, then we shall be on a highly civilized basis. What is occurring is this: The Farm is releasing men to help Manufacture and Transport catch up.

—Henry Ford.

What Is Happiness?

What is Happiness? That is a question as old as the world and every mortal pursues it for his brief lifetime.

Is it Knowledge? No. Some of the narrowest and most unhappy men in this world have possessed the keenest intellects, the widest learning and the greatest knowledge.

Is it Money? Perhaps, but only so far as Stevenson's rule holds: "Earn a little—spend a little less." Enough money for comfort, for self-respect, for self-confidence and a feeling of relief from pressing needs. Nothing more. And what money we have should only come as the equivalent of services rendered. Anything we get without earning it, we get because someone else really earned it who did not get it. Such money can never bring real Happiness to anyone.

Is it Health? Perhaps. Surely splendid health brings that feeling of general well-being and power which contribute so much toward Happiness in general. Still, some of the happiest persons this world has known have been practically invalids. So health is not an absolute necessity to Happiness.

Is it Success? Partly. If you

believe that real Success means increased capacity, greater ability, bigger results, wider influence, more friends in the world and more harmony in the home, then Success is partly necessary to complete Happiness for all of us.

Is it Friends? Surely. The possession of friends implies the possession of qualities which made for happiness in ourselves. We must BE friends to have friends. We must ourselves have good temper, unselfishness, loyalty, sympathy and uprightness and character if we are to make good friends and to keep them. All the characteristics which make friends, make Happiness, also.

So, you see, the only reliable rule for a happy life is just this—to cultivate the large interests and the small pleasures. This, in itself, is the essence of religion. You will find it all through the sayings of the Man of Galilee.

May you never be influenced by the cost of anything as the only means of gauging your opinion of it. May you never make the dollar mark the sign of your friendship or pick your friends for their wealth or their social position or what they can do for you. You are YOU—with all the heritage of great opportunities offered by the greatest country this earth ever knew. Let there be no limit to your ambition for achievement in the kind of work you love most and eventually your ambition will be fully realized if it be a worthy one and you make yourself worthy of it.

Be a man of ideas and ideals and be true to them throughout your whole life. Let trials, sorrows and disappointments only make you broader in tolerance toward others instead of bringing cynicism or bitterness. Happiness is not some distant goal. Happiness lies within yourself and so is within your grasp every day if you live each day as you should. Tomorrow is a promissory note. Yesterday is a canceled check. The only real opportunity for Happiness is today. So use each "today" to get as much Happiness as possible and remember that you can only GET as much Happiness as you GIVE.

Good Work Is Never Wasted

The old, old "Law of Conservation of Energy" teaches that nothing is ever completely destroyed.

No work you do can ever be wholly lost. The results may not come at once. The results may be different from what you planned. It may seem like a complete failure—like wasted effort. But from some unexpected source some time, success comes to you. You may call it luck. It is the result of your past work.

No work is ever lost. No effort is ever in vain. Action is equal to reaction. You will surely "cash in" on any good work you ever do.

Auto Camps Boon to Tourists



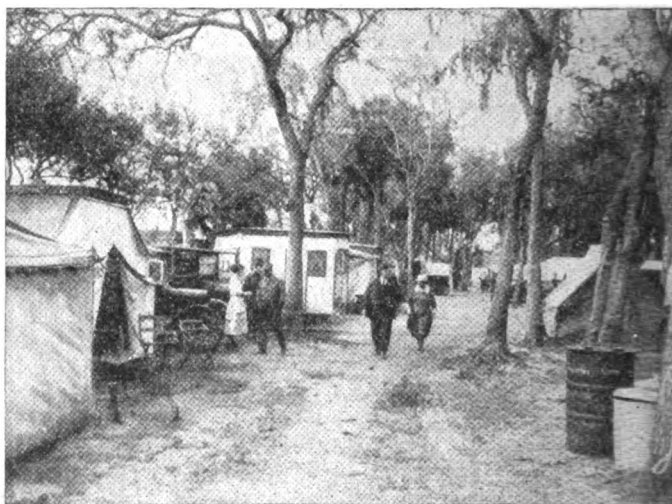
Camps like this one are making the "automobile" vacation increasingly popular.

The season for tourists is here again and the present indications are that more vacations will be spent "by automobile" this year than ever before. The automobile camp is a growing attraction which is encouraging many persons to undertake the long tour. Nearly every town along the main highways has a camping site where the traveler is made welcome. At many points a regular attendant is placed in charge of such camps to insure

healthfulness and orderliness and to be of general assistance to the campers.

Some camps have provided for club houses and reading rooms. The cooking arrangements vary from wood-burning stoves or gas plates to screened-in kitchens. Camp tables and benches are usual and electric lighting is frequent.

This is good business and good advertising for any town. It is also very good hospitality, as many tourists will testify.



"Main Street" of tourists' camp at Tampa, Florida.

Pithy Paragraphs

Low-down practices keep a man low down.

When I'm cheated I'm ashamed—of the other fellow.

To do your best for your organization do your best for your constitution.

A leaf hits the ground and dies; a seed takes root and grows. Which are you, leaf or seed?

Those who have nothing else need a great deal of money for their happiness.

The way to escape difficulties is not to run away from them.

The best day of the year is—today.

"Manners are the happy ways of doing things."—Ralph Waldo Emerson.

Your reputation will outlast your riches. Put reputation first.

"Don't wait for extraordinary opportunities. Seize common ones and make them great."—Orison S. Marden.

Prospecting for Iron on Company's Property

Weeks Spent on Isolated Areas; Snow-Bound During Winter

Work to Determine Resources of Vast Upper Peninsula Holdings

The preliminary work in mining operations, known as prospecting, covers weeks or even months in "frontier" districts searching for mineral outcrops or rock indicating that valuable minerals may be present. Pros-

pecting is now carried on in a scientific way by means of up-to-date machinery whereby a promising mineral field is thoroughly tested by drills. In iron prospecting the core drills are used. The core or diamond drill is most important in this particular work because it obtains a core, making it possible to determine accurately the formation through which the drill has passed together with its thickness, depth and the mineral content. Usually the ground is marked out in squares of 100 to 500 feet on a side and at the corners or in the center of each square so marked out a drill hole is sunk and the core thoroughly tested. The work is always carried on in conjunction with geological studies. Trenches are often cut across mineral zones, and small shafts sunk to test the character and quality of the mineral.

During the past winter these camps were almost inaccessible, due to the deep snow. However, precautions against being "snowed in" were taken by having from three to four months' food supply on hand. For four days during the past winter the thermometer registered almost continuously 40 degrees below zero. On this occasion the men worked shifts in keeping the water pipes from freezing. The water is pumped from a lake a quarter of a mile from the operations and the pipe lines are hung on the trees across the swamps to facilitate draining. As the operations depended on water for the diamond drill it was necessary that the pipes be kept open.

"Pulling the rods" containing the core is a cold job in the winter. Once a hole is started, work must not cease until a sufficient supply of mineral-bearing soil has been obtained to send to the laboratories for assay and record. The mineral-bearing matter is sent to the laboratories in long wooden chests and the depth from which the rock is taken is marked on the chest so that the chemists may determine the best place for mining operations. Mineral-bearing material in this particular district is taken from

a depth which varies from 100 to 250 feet. In some instances drilling operations approximate a mile in depth.

Tractor Demand in Philippines Grows

Alabang, Philippine Islands—Demand for tractors in the Philippines is increasing remarkably according to reports from Dealers. In 1917 four tractors were sold, in 1918 six, and in 1919, 597, while during the fiscal year ended June 30, 1920, more than 800 were sold. This increase was largely in consequence of a tractor demonstration held at the government demonstration farm near here in October, 1919. Ten tractors were tested under the most exacting conditions. As a result of these trials, tractors won a place in Philippine agriculture.

Interesting News Notes From Among the Ford Dealers

Lumber Company Adopts Unique Advertising Method; Fordsons Save Contract for Oil Operator

Guin, Alabama—In making a check of the numbers and make of cars sold within a radius of 10 miles of this place the Wright Motor Company, Ford Dealers, discovered that in the past five years every car sold in this particular district was a Ford with only one exception. During that time the sales of this Dealer were: 1919, 62; 1920, 90; 1921, 55; 1922, 105 and so far this year 46 have been sold.

Electra, Texas—Four Fordson tractors saved John O'Neil a tidy sum of money lately. O'Neil is in the oil business and some time ago purchased a tract of land to further his operations. He was bound by contract to commence drilling operations by a certain date and when he signed he had fully intended to commence at once. But rainy weather came and time went on until the "eleventh hour" was at hand. Muddy fields made it seem almost impossible to get the drilling apparatus to the field. There was no time to see about an extension so John O'Neil ordered a star rig to the field. Only one Fordson started the journey but both the rig and the Fordson went to the hub in mud. Another Fordson came but still the mud was stubborn. Still a third and then a fourth Fordson was hitched onto the rig and the trip to the field was made in plenty of time to begin drilling operations before midnight of the forfeiture day.

Jaboticabal, State of Sao Paulo, Brazil—A feature of the annual carnival held in this place recently was a Ford touring car decorated by the Ford Dealer. Ford products play an important part in this district. The chief products of the state are coffee, rice, tobacco and sugar cane. Many of the plantations are so far in the interior that owners favor the use of Ford products because parts are easily obtained when any trouble occurs.

Newark, New Jersey—The W. J. Morgan Automobile Company here are responsible for a novel advertising stunt. They have a Ford closed body truck equipped with wireless receiving set. During the broadcasting hours, tours are made through the city's streets and by the aid of a magnavox the concerts are clearly received by the public. Once a crowd gathers the salesmen are busy distributing Ford literature.

A unique advertising campaign is that being put on by Mr. G. A. Nichols, of Oklahoma City, Oklahoma. The outfit consists of a miniature bungalow mounted on a Ford

chassis over a regular Coupé. The little bungalow is lighted throughout and it presents a very striking appearance on the street. Mr. Nichols is one of the largest home builders in the Southwest and the bungalow car is used by one of his salesmen.

In this day of intensive advertising it requires something quite out of the ordinary to attract attention. This novel means of winning over the hesitant home builder might well



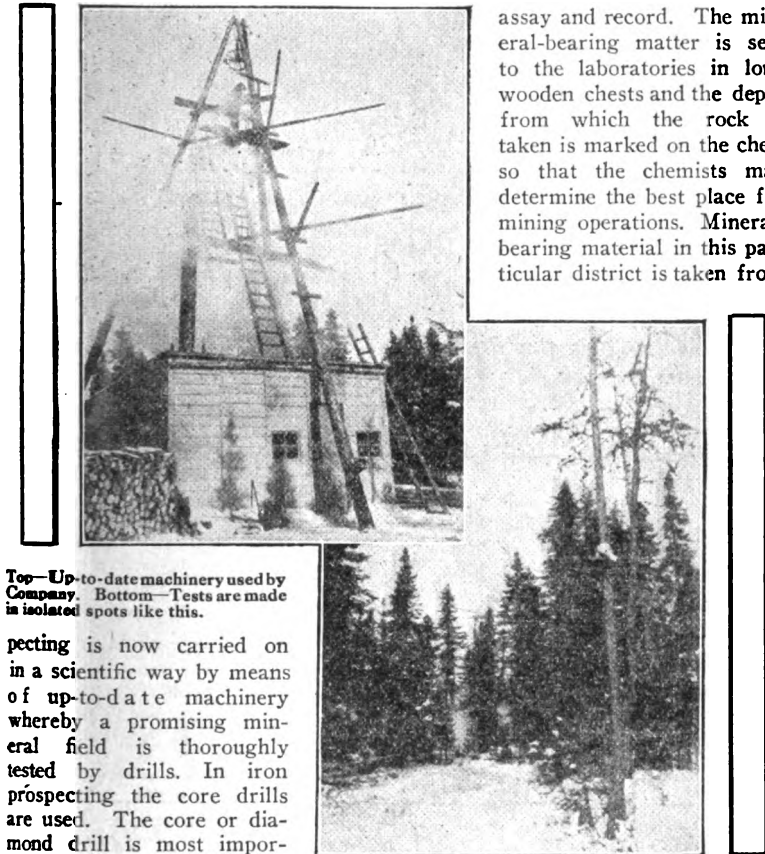
be applied to other fields of endeavor. A little ingenuity on the part of the aggressive advertiser coupled with a worth-while idea may be the means of expanding a business far beyond the fondest hopes of the business manager.

A little thought on the part of the Dealer oftentimes means something to the purchaser. Have you any ideas? Look about you and do not be afraid to suggest to the prospect ways and means of advertising his product as this man has done. You will benefit not only yourself but the buyer, his clients and your entire community.

Guadalajara, Jalisco, Mexico—Both Ford and Lincoln cars were well advertised at a recent bullfight. This particular fight was one of the largest events in the republic. The Ford Dealer in this city, the Hinkle-Downs Motor Company, succeeded in placing a "Ford and Lincoln" sign immediately over the governor's private box. But the Dealer didn't stop at this. He decorated the private box with a beautiful framework of flowers, using the word "Ford" as the principal design in the decoration.

Chicago, Illinois—Stanley G. Graham, a well-known Chicago sportsman, has just returned from an eight-month trip with a Ford into the jungles of Sonora in Northwestern Mexico. He claims that the Ford is far better than the horse for traveling except on the extremely narrow mountain trails.

He says, "It is true I have found a new use for the Ford. It was so far between waters down there that we simply had to use them. Gasoline beats horseflesh on the long run."



Top—Up-to-date machinery used by Company. Bottom—Tests are made in isolated spots like this.

pecting is now carried on in a scientific way by means of up-to-date machinery whereby a promising mineral field is thoroughly tested by drills. In iron prospecting the core drills are used. The core or diamond drill is most important in this particular work because it obtains a core, making it possible to determine accurately the formation through which the drill has passed together with its thickness, depth and the mineral content. Usually the ground is marked out in squares of 100 to 500 feet on a side and at the corners or in the center of each square so marked out a drill hole is sunk and the core thoroughly tested. The work is always carried on in conjunction with geological studies. Trenches are often cut across mineral zones, and small shafts sunk to test the character and quality of the mineral.

During the past winter these camps were almost inaccessible, due to the deep snow. However, precautions against being "snowed in" were taken by having from three to four months' food supply on hand. For four days during the past winter the thermometer registered almost continuously 40 degrees below zero. On this occasion the men worked shifts

Boy Violinist Plays for WWI Audience

New Wave Length and Earlier Hour Approved

Interesting Readings Feature Entertainment; Skilled Pianist Pleases Listeners-in

WWI program of May 9 was the farewell of the old order: that is, it was the last evening when WWI broadcasting started at 10 in the evening and the old wave length of 360 meters was used. Beginning May 16, the new hour, 8 p. m., and the new wave length of 273 meters, will be adopted, in accordance with United States Radio Regulations which became effective May 15.

One of the greatest treats accorded the WWI family is to hear the masterpieces of piano music played with the skill, power and feeling that marks that of Mr. Radovanovitch. This treat was enjoyed on the evening of May 9, when Mr. Radovanovitch played two selections from Mendelssohn, both popularly known as "Song Without Words," and two Mazurkas by Chopin.

The Robinson sisters—Miss Lillian playing the piano, Miss Helen, violin, and Miss Gertrude, saxophone—gave several well-known numbers, among them "Barcarolle" from "Tales of Hoffman," and "Three O'clock in the Morning."

The tenor solos by Mr. Robert Grant, who sings with much power, were also appreciated by our listeners-in. Mr. Grant was accompanied by Mrs. Norman Giles at the piano.



The Robinson Sisters.

Miss Helen Taschner opened the WWI program of May 16 with an enjoyable piano solo. "The World Is Waiting for the Sunrise." She also accompanied her brother, Frank J. Taschner, in several violin solos, later numbers on the program. Mr. Frank Taschner is just 12 years of age, and his rendition of the selections he

chose, which included "Meditation" (from "Thais") and "Berceuse" (from "Jocelyn"), was most praiseworthy.

Mr. Harry Funk is not unknown to our radio family. His rich baritone voice, which he handles with consummate art, has been borne out on the night waves of WWI previously. As a consequence, many were pleased to hear the altogether delightful selections of this evening, among which were "The Forest King," "Tatters," and "On Berrow Sands." Mr. Funk was accompanied by his wife at the piano.

The robust poetry of Robert Service, who tells his tales in a most appealing and straightforward way, is enjoyed by most persons, especially



Mr. Frank J. Taschner, boy violinist, and accompanist, Miss Helen Taschner.

men. This evening's program was enriched by several readings from his "Ballads of a Bohemian," read by Mr. Harry B. Elliott and Mr. William Kauffman.

Bulgaria Sees Tractor Value

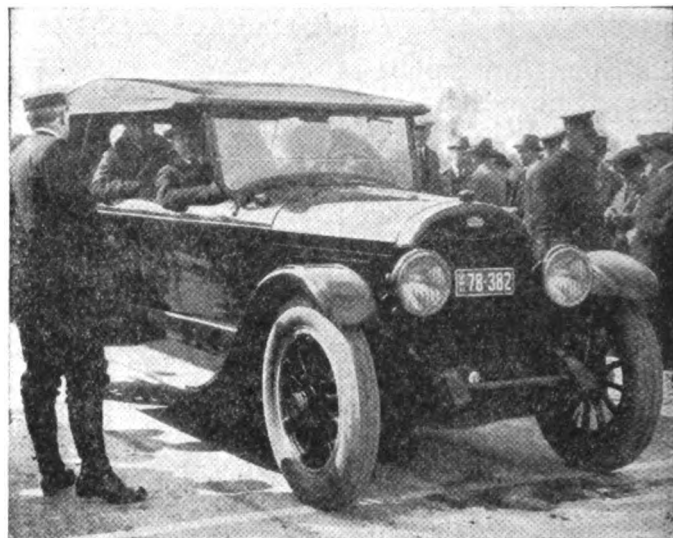
Fordson Offers Boon to Backward Farming Country

Bulgaria, like most of the Balkan States, is primarily an agricultural country. A favorable climate and fertile soil make for abundant crops. The farmers are thrifty and energetic, but until recently they were obstinately adverse to the introduction of modern methods of farming. However, the Fordson is paving the way and when its possibilities are fully realized there will be created a demand that will prove very profitable. Bulgaria enjoys the reputation of possessing more centenarians than any other country in Europe. More than 70 per cent of the population are engaged in agriculture and most of them own freehold plots on which they pay a small land tax. More than \$1,500,000 worth of attar of roses is produced annually in this little country. With the advent of power machinery the production of farm produce will show a sharp advance and the people will prosper accordingly.

Nova Scotia has adopted the "drive-to-the-right" rule of the road.

Lincoln Victorious in Police Races

Concluded from page 1



The record made by this car has been the first spectacular recognition of the fact that the Lincoln is the fastest stock car in America.

than the next contestant which was a Cadillac, and nine seconds faster than the Packard Twin-Six. Paige and Peerless finished respectively fourth and fifth.

Just before this trial, however, Mr. Edsel Ford asked to be driven over the course, at which time a speed of 87.9 miles an hour was reached. The Lincoln also gathered in all the honors in the half-mile run from a standing start in the record time of 38 and 2/10 seconds, attaining a speed of 76 miles an hour followed by Packard and Cadillac.

The police had also staged a short quarter-mile acceleration test starting in high gear at five miles an hour and the Lincoln came within two-tenths of a second of winning this event as well. This event was won by a Packard Twin-Six with a 420 cubic inch displacement motor,

the Lincoln having but 357 cubic inch displacement.

After the race the car was taken over by the Police Department and torn down for rigid inspection.

These sweeping Lincoln victories are unquestionably a triumph for modern engineering.

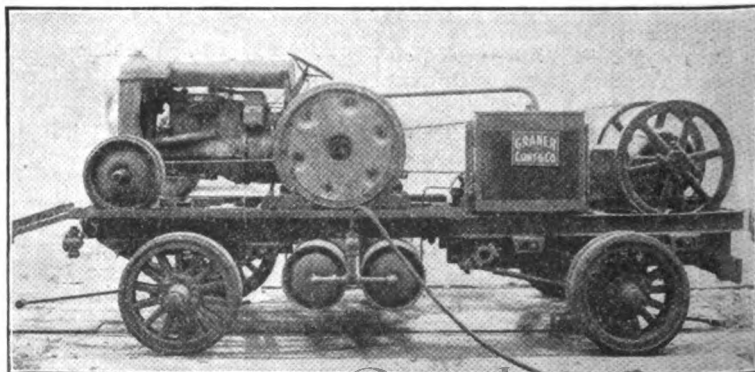
Moreover, they indicate plainly that an automobile must possess more than beauty in line and distinctiveness in design if it is to measure up to the exacting demands of the public today. It must be capable of rendering satisfactory service under the most trying circumstances.

When the Ford interests acquired the Lincoln it was not realized that it was the fastest stock car in America. It was known, of course, that it was a very fast car, but it had never been entered in races or other contests.

Fordson Used as Power Plant

Because it was essential for the Graner Contracting Company to have a reliable and portable air compressor a Fordson was picked as the power plant. The results that followed have been very satisfactory according to the contractors. A special chassis was obtained. The equipment

was so arranged that the tractor was run onto the chassis to operate the air compressor. When moving time came the tractor was run off the chassis and hitched to it. This idea is especially satisfactory for use by contractors on isolated jobs where other power is not available.



Arrangement by which the Fordson supplied power for the air compressor.

Fordite Surpasses Wood for Steering Wheels

Concluded from page 1

a sausage grinding machine. As it comes out it is cut, on the bias, in lengths of 52 inches and then is ready to be rolled into the outside covering of fine rubber-like substance.

After the core has been wrapped into the covering, which is of equal length and seven and a half inches wide, affording a double cover, the whole is secured in circular form and sent to steel molds the exact size of a steering wheel.

Held fast in these molds under hydraulic pressure of 2,000 pounds to the square inch, these Fordite steering wheels are subjected to a heat treatment of 68 pounds of steam for a period of 50 minutes. Hot as they come from the steam ovens, they are soft and pliable, but within a short time after they are placed on the cooling racks they assume

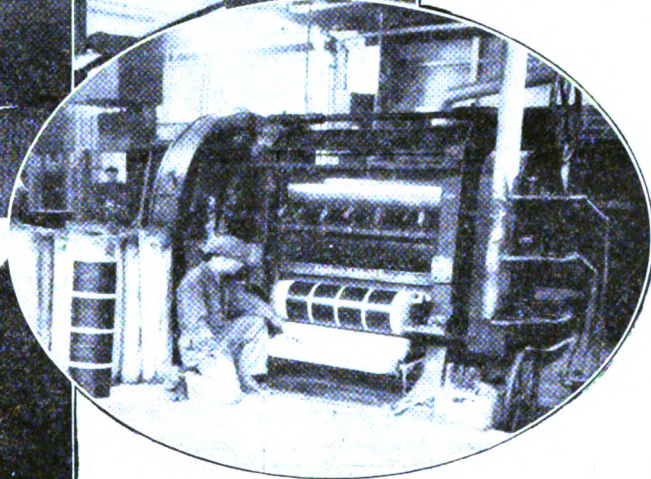
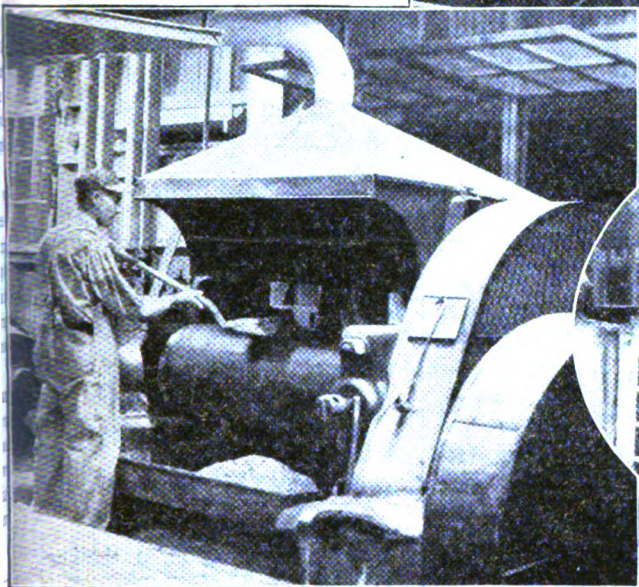
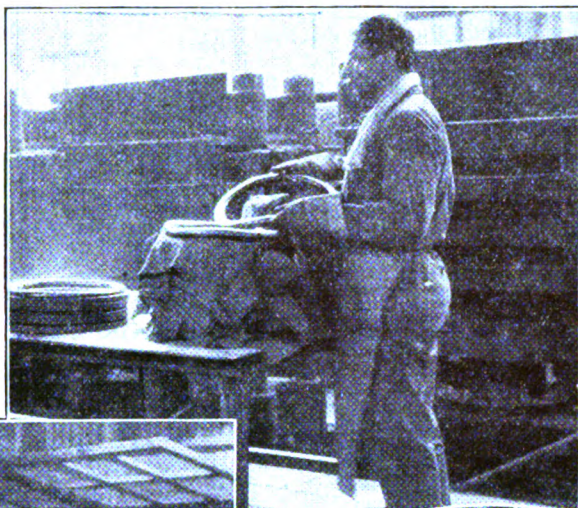
a flint-like hardness that remains.

Next, Fordite steering wheels go to the finishing rooms where they are smoothly trimmed and polished. The pressed steel "spider," or cross piece, is then placed in the wheel and securely fastened on by a machine which in one operation bores a small

hole and in the next screws in the screw. The steering wheel is then ready for shipment and assembly on the car.

Manufacture of these wheels is only a part of the work done in the Fordite Plant. In addition it turns out a daily average of 9,000 front

spring pads, 150,000 commutator insulator buttons, 9,000 magneto contact insulators, 7,500 cut-out insulators, 8,000 motor starter insulators, 8,000 generator insulators, 8,000 dash terminal blocks, 6,000 battery cable bushings, 19,000 hood block bushings, 20,000 tail light wire bushings, 3,200 battery covers, 6,500 rear panel plugs and 10,000 cable insulators for metal dashes.



Upper—Placing raw wheels in iron molds preparatory to curing in presses shown in background. Lower, left—Compounding batches in the rubber mill. Lower, right—Calendering the covers.

Fleet of Service Cars Help Business

Up-to-Date Equipment Is Good Investment, Dealers Say

Realizing the value of having a complete and up-to-date service fleet, the Richmond Motor Company of Richmond, Virginia, have just re-



The Richmond Motor Company.

cently completed their last truck. Replacing their old equipment involved considerable expense but great pride is taken by the Dealers in their service department. Such a service fleet should act as an incentive for other Dealers. The Richmond Dealer believes that as service cars travel about the city and suburbs, being seen by thousands of persons, they leave an impression according to their appearance.

They are fully equipped in every detail for service work. Particular attention was paid to the style of lettering of the words, "Lincoln, Ford and Fordson." These conform precisely to the standard adopted by the company.

Pulling trains day after day is very hard on locomotives. More than a fourth of the locomotives in the freight service are either in the "engine hospital" or awaiting their turn to go there.

Ford Pilgrimage Features 50 Old Models

Man With 1906 Model N Wins Car in Motor Festival

Jacksonville Event Highly Successful and a Worthy Advertising Proposition

At the April Follies in Jacksonville, Florida, a Ford pilgrimage was held and a new car was actually given away for an old one. This was one of the many features held in connection with the annual spring festival of Jacksonville citizens.

The pilgrimage was really a striking success according to reports from the Dealers. It was widely advertised and every person was urged to

come out and take some part in the festivities. It proved to be a wonderful advertising medium for the Florida Dealers. Practically every city official took some part in the affair. Lodges, school children and officials from adjoining cities and towns turned out. The parade was one of the big features. It was close to two miles long.

More than 50 old models of Ford cars made their appearance. First prize in this class went to a man owning a 1906 Ford, one of the first Model N's. For having the oldest Ford on parade he received a brand new Ford touring donated by Blair Burwell, of the Burwell Motor Company. It was completely outfitted by the accessory department of the Consolidated Grocery Company. This was the main even of the day.

Many other prizes were also awarded.

Fordson Reclaims Waste Land



1,000 acres of uncleared land was no obstacle to these four Fordson tractors, which reclaimed it in a highly efficient and economical manner.

If the early settlers and pioneers of America could only watch the modern methods of clearing land they would wonder that there should be any uncleared land at all. The Palmer Trust at Sarasota, Florida, had 1,000 acres of new land to be cleared. This they decided could be done most economically with tractors and as a result four Fordsons were put to work. Large irrigation projects are be-

ing advanced and much territory is being reclaimed. Miles of drainage canals are a common sight and the Fordson tractor in connection with all phases of the work has proved itself serviceable and economical.

Life lines are now illuminated by radium. This aids the coastguards in tracing the line when shooting it toward the stranded ship.

Fordson Opens Snow-Bound Pass

Demonstration Watched by Prominent Officials

Tractor, Equipped With 48-inch Rotary Plow, Clears Away Frozen Snow

The Sunset Highway is the only road over the Cascade Range which separates Eastern and Western Washington. This road is closed to traffic six months out of the year on account of the heavy snowfall in the mountains, and it has long been a problem to state and county officials as to how the road could be kept open for travel during the winter months.

For the purpose of demonstrating to state and county officials that the road really could be kept open if the proper equipment was employed, arrangements were made with Governor Louis F. Hart to visit Snoqualmie Pass on March 23 and witness the work which had been planned by the Seattle Branch of the Ford Motor Company. A Fordson tractor was

Pasadena Uses Fordson

Another Fordson tractor has been purchased recently by the city of Pasadena, California, William E. Smith, Ford Agency, 707 East Colorado street, making the sale. It is now hoisting lum-

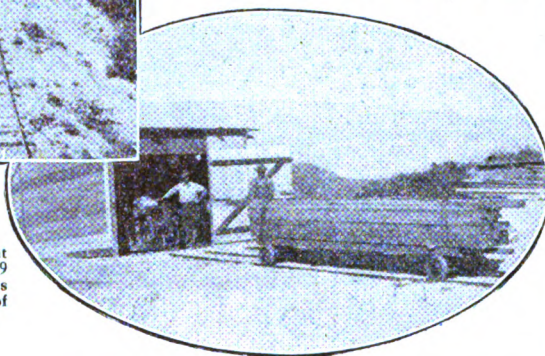


Above—Up a 45 per cent grade 345 feet long, a 149 foot lift; the Fordson does the work. Oval—Load of lumber at top of grade.

ber and other material up a 45 per cent grade, a distance of 345 feet and with a vertical lift of 149 feet. This is being done for the new Pasadena reservoir. The tractor, equipped with a hoist, by means of a cable, hauls an average of 4,200 pounds to the car-load up the grade.

The tractor will continue to haul material for the city's reservoir for another six weeks and then it will be turned over to plowing work and will be used in unloading pipe.

According to the city water department the Fordson is a distinct success and is not only saving money but is accomplishing a great amount of difficult work.



Buy a Ford

Foremost in cars. The one to go Fighting her way through frost and snow, Fearing neither wind nor rain, Finding her way o'er hill and plain.

On roads fast bound in mud and clay Only a Ford can find her way, Or through a dried up river bed, Opening a path where none have led.

Remember she is built with care. Right manfully she'd get you there. Rough roads don't count, she's built for these. Royally she'll take you where you please.

Dainty and light as she appears, Driven with care, she'll last for years. Destined to carry four aboard. Decide at once, and buy a FORD.
—Mrs. S. McLeod Smith.

One-third of the earnings of the German husband must be given to the wife to maintain the family table. That is the German law. This one-third income is not to meet wages of servants or rent but merely to cover the expense of keeping up the table.

The students in the Berlin "Students' Home" are so poor that three have to share one suit of clothes and attend the classes each in turn.

Contest Closes at Hamilton Plant

Many Different Uses for Spoke Ends Are Suggested

Hard Wood Distillation Awarded First Prize; Flooring Comes Second

It will be recalled that a contest was recently held at the Ford Motor Company's Plant at Hamilton, Ohio, offering prizes for the best suggestions offered for the use of the waste spoke ends.

A keen interest was taken in the contest as was evidenced by the number of suggestions received from the Highland Park and River Rouge Plants. The first prize offered was an Ever-Sharp pencil and pen set, the second, an umbrella, the third a bill fold. The contest closed having brought out 41 uses.

After a careful study it was agreed that the following men should receive the prizes in the order named: Fred Squier, No. 334 Production Stock, first prize.

Ray Bennett, No. 824 Sanitary, second prize.

Charles Limerick, No. 1457 Millwright, third prize.

The following received honorable mention:

Frank Blagg, No. D-33 and Edgar Eicher, No. 223.

Mr. Squier's suggestion "Hard Wood Distillation" covered seven headings and below we give it as turned in:

"The hickory from which we make our spokes is 'capable of yielding numerous by-products. The wood is placed in a retort and goes through a distillation process which leaves and deposits material and given in the following outline:

1. Charcoal

(a) Meats are packed in charcoal as a preservative on long voyages.

(b) Foul water is purified by filtering through charcoal.

(c) Used in sugar refineries to bleach sugar (bone black is better).

(d) Used in gas helmets and masks to absorb poisonous gases—

(e) Used in tinner's furnaces—

2. Illuminating gas

This can be turned back to furnish heat for the distillation.

3. Pyroligneous acid liquid smoke

(a) Used in smoking meats—

4. Acetic acid

(a) Industrial acid

(b) Combined with lead salts makes sugar of lead—

5. Creosote oil

(a) Used as a wood preservative

6. Wood naphtha

(a) Wood alcohol

(1) Used in auto radiators in cold weather

(2) Ingredient in shellac

(b) Formaldehyde

(1) Disinfectant

(2) Used in embalming

(c) Acetone

(d) Light acetone oil

(1) Used in making explosives

(2) Used in motion picture films

(e) Heavy acetone oil

(1) Used as a paint thinner

7. Pitch

Used with gravel or slag for roofs.

Mr. Ray S. Bennett, the winner of the second prize, suggested using the waste spoke ends for flooring, either squaring them or making them hexagonal and using them in much the same manner as hexagon tile flooring is used. He submitted a sample and the committee believed while it would not be practical for factory flooring it would make a very fine fancy floor for residence or ballroom use and with properly designed machinery would be a salable article.

Mr. Charles Limerick was awarded third prize on wooden mats and floor brush. A sample of both was submitted, each of which was practical. The mat especially could be used in our own Plants.

The following men were given honorable mention:

Frank Blagg and Edgar Eicher, both of whom suggested the spokes could be shorter in the rough, and figured what saving could be made both in production of wheels, transportation space and kiln space.



Governor Louis F. Hart.

equipped with a 48-inch rotary snow-plow. Through frozen snow, ranging from four and one-half to five feet in depth, the tractor pushed the plow at the rate of 30 feet per minute, making a very favorable impression upon the officials present.

This demonstration left no doubt that if tractors were put to work early in the season the pass could be kept open to automobile traffic during the entire winter.

Alaska has produced nearly \$500,000,000 worth of minerals, and 97 per cent of this has come from her deposits of gold, copper and silver.

Among the famous inventions of the Chinese are the following: The compass, printing, lithography, suspension bridges and gunpowder.

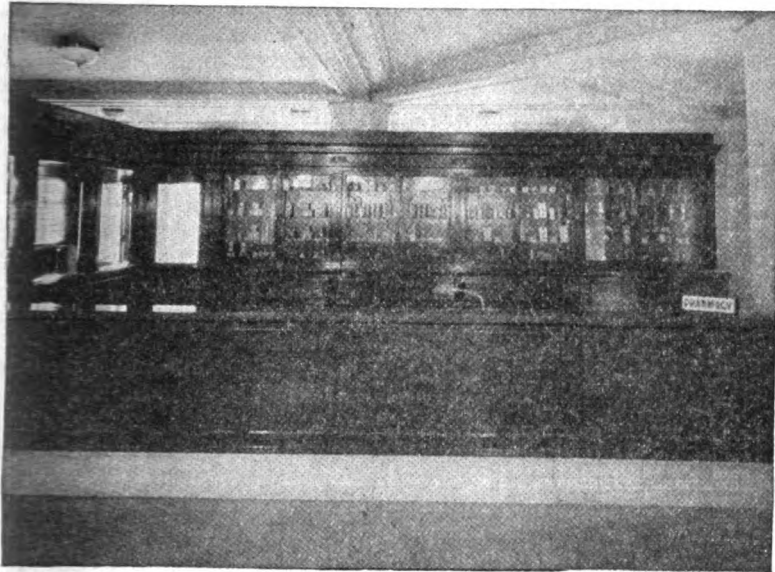
From Raw Materials to User Through Hospital Pharmacy

*Competent Pharmacists Fill Out as Many as 200
Prescriptions a Day; Each One
Checked Three Times*

A pharmacy. The modern definition might read, a place where cigars, ice cream and hair nets are kept instead of a place where drugs and poisons are kept. But this definition would not apply to the Department of Pharmacy at the Henry Ford Hospital, which is one of the best equipped and most complete places of

quantities, used for massages; tooth paste, food flavors used in the kitchen, and a number of other articles not usually manufactured in the pharmacy of today.

Practically every preparation used in the hospital is made from raw material in the pharmacy laboratory. Everything manufactured is checked



Pharmacy, main lobby, Henry Ford Hospital.

its kind to be found in this country.

The Department of Pharmacy is divided into two little departments, the pharmacy proper, which is located in the main lobby where all prescriptions are filled and a limited variety of merchandise, such as tooth paste, tooth brushes, hot water bottles, atomizers, and so on, is sold to patients, and the pharmacy laboratory, which is located in a separate building, where all the medicinal preparations are prepared for the hospital. In addition to this the pharmacy laboratory manufactures all the liquid soap used in soap containers throughout the hospital; cold cream, in large

three times before it leaves the laboratory.

A lot of time has been spent to make the medicines as pleasing to the palate and appetizing in appearance as possible. A variety of sirups and flavors are used for this purpose. In making flavors, such as orange and lemon, the fresh ripe fruit is used instead of a synthetic extract.

The pharmacy proper is a very busy place, as high as 200 prescriptions being filled in one day. The pharmacy is open from 8 a. m. to 6 p. m. and always in charge of competent registered pharmacists.

From Explosion to Safety

An explosion recently occurred at the Portland Branch starting a slight fire on the Final Assembly conveyor.

This was caused when a workman started to install tank on chassis. The tank was empty at the time but gasoline had been in it previously. The pet cock and shut-off valve were open. This was struck with the live cable from the battery, thereby causing vapors in tank to ignite and explode tank; resulting fire was quickly extinguished without causing further damage.

The fire company responded promptly and without confusion and

production was not interfered with.

Steps have been taken to prevent a reoccurrence of this by keeping cocks closed on all tanks and also temporarily connecting wire to switch, so same is not loose where it could be struck. Also when repairing gasoline tanks, blow out with steam—water and air not sufficient.

Blind persons who reside in Ontario may travel free of charge on the streetcars of Toronto and environs. Applicants for passes on this account must be totally blind.

Opening of New Building an Event of Importance

Salt Lake City Boasts Model Dealer's Establishment

*Visitors Impressed With the Beauty,
Completeness and Dignity
of Structure*

In the entire West there are few cities which can boast as fine an automobile establishment as Salt Lake City in the building recently completed and occupied by the Covey-Ballard Motor Company, Ford, Fordson and Lincoln Dealers.

The opening of the building for public inspection was a notable event and, in addition to affording the visitors the opportunity of seeing the big automotive establishment, various entertainment features were provided and light refreshments served during the afternoon and evening. So busy were all departments that work was not stopped during the inspection tours of the visitors.

Approaching the building on Fifth south street, its size and general appearance are most striking. Great doors open into the showroom and large plate glass windows on two sides not only flood the big display space with light but give a sweeping view of the entire room from the outside.

However, the inside leaves the most striking and lasting impression. The floor is laid in polished Terraza tiling in soft red-brown. The paneled walls on the west in their warm ivory tone with piers of the same tint form a fitting background for the tastefully arranged display of cars in all models. Massive moldings divide the ceiling into large panels in gray and ivory.

A broad stairway leads from the sales floor to the mezzanine, where are situated the offices. On this floor also are cloakrooms and rest rooms for women employees and a conference room for the Sales Department.

Driving down the broad entryway to the north end of the building, patrons are given a convincing demon-

stration of the architect's skill in designing the great ramps which lead to the successive floors of the building. These ramps are constructed of reinforced concrete and, with a gradual slope, carry the cars between floors without apparent effort. The turns are broad and a low concrete curb through the center of the ramp prevents up-bound cars from colliding with down-coming cars. The ramps are broad enough for two cars to pass each other and the most timid driver is impressed with the safety of travel from one floor to another.

There are a great many other features of the establishment. Large stocks of tires, rims, accessories, special equipment and spare parts are carried. These stocks are all located in specially built subdivisions, scores of bins, shelves and drawers being required.

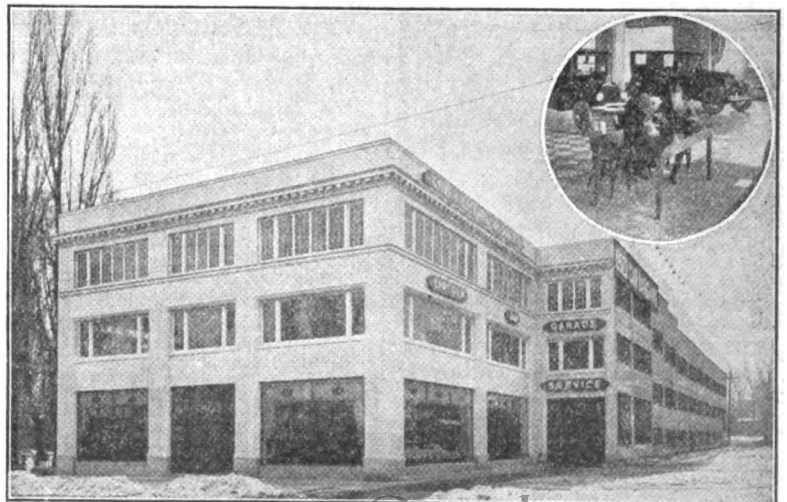
Safety Meeting Made Social Event

On Wednesday, May 2, the Hamilton Branch held a Safety meeting for the benefit of their employees and families; one meeting being held at 1:15 p. m. for those going on duty at 4:15 p. m. and another at 8:00 p. m. for the day men and those going on duty at 12:15 midnight.

A very fine program consisting of talks, music and motion pictures was enjoyed by those present.

The meeting was a marked success in every way. Five hundred persons attended the afternoon meeting, and the night meeting was attended by approximately 1,200, all available seats being taken.

The Safety Department has already received several suggestions along Safety lines, a direct result of the meeting, and several suggestions have been made that others of the same nature be held at some future date.



New Covey-Ballard home, Salt Lake City, Utah. Insert—Small portion of sales floor.

Ford News

Volume II. F

Dearborn, Mich., June 22, 1923

No. 22

Plants Attain Lofty Record

Long - Sought Mark of 7,000 Cars Daily in Sight

Departments Vie for Highest Honors; Best Figure for Daily Output Stands at 6,781

Constantly pushing the production record to higher altitudes every day, the Ford Motor Company is within sight of the goal of 7,000 cars and trucks per day.

The record day was May 28, when the output reached 6,781 cars and trucks. For the week, ending the following day, total was 39,563. For the same period, 1,890 tractors and 182 Lincolns were made at the Fordson and Lincoln Plants, respectively.

Figures continued to ascend for the next week, and would doubtless have gone well more than 40,000 had Memorial Day not been a holiday. For the five-day week, ending June 5, the total cars and trucks made numbered 34,730; while Fordson an-

The Rouge Foundry established a new record on June 5 when 9,180 cylinders were produced.

Benson Furnace at the Rouge Plant makes a new high record for the low consumption of coke, averaging 1,906 pounds of coke per ton of iron.

Average tonnage 524 tons per day. Silicon 3.25, Sulphur .026.

nounced 1,930 tractors produced, and Lincoln 157 cars.

The present high day exceeds by 123 the day previously holding this honor, which was May 21.

The Lincoln shipments for May broke all former Lincoln records for cars shipped, being 780. The last previous high record was made in June, 1922, when 734 cars were shipped. This new record is the more impressive from the fact that during the past year many improvements have been made on the car, which have entailed considerable additional labor.

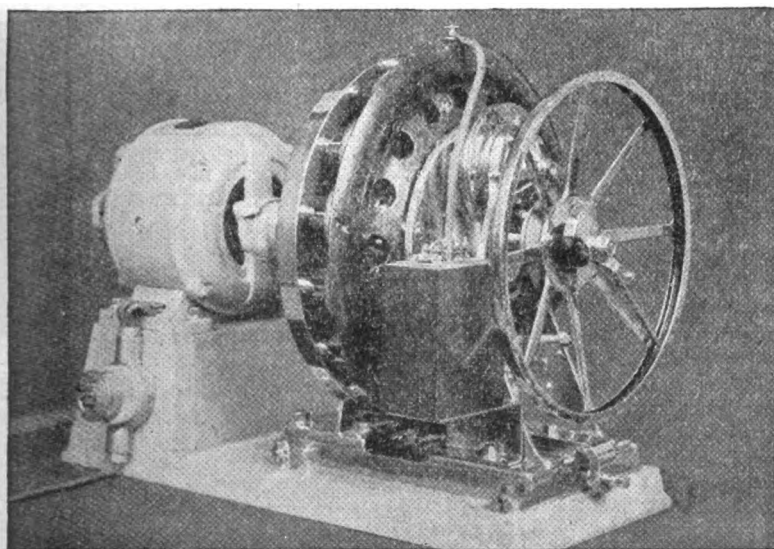
Smithsonian Adds Ford Magneto

A vital and liberal education in history greets the visitor to the National Museum. Not only does he find records of history that is made, but he discovers equally important displays of history in the making. There will be found collections that represent the current culmination of

growth and progress, today of everyday experience, in years to come probably of tremendous historic value.

Complying with a request from the Smithsonian Institution, a working model of the Ford Ignition Sys-

Concluded on page 4



Ford Magneto on display at National Museum.

Plant at Green Island Starts Heavy Production

Lincoln Addition Now in Use

Radical Changes Give Motor Assembly Efficiency

The present period sees at the Lincoln Plant a scene of remarkable activity, not confined altogether to motor car production.

The immense addition to the original building is complete to the extent that the Motor Assembly Department has started moving into it. This is the first of several changes that will reorganize the various departments and the positions they occupy in the building arrangement so as to lend increased production efficiency. Other departments will be moved in as fast as the new building is made ready for them.

A test track is being constructed near the Plant to be used for test runs for Lincoln chassis and finished cars. The track length is 3,082 feet, or approximately three-fifths of a mile long. It is estimated that a speed of 60 miles an hour can safely be made on the straight-aways. Obviously, this test will be another guaranty of dependable Lincoln service.

Lincoln production, in spite of the alterations which have been going on at the Plant, is the best ever reported by this division of the Ford Motor Company.

Interest Soon on Certificates

Payments to Holders Will Be in Cash

Payment of the interest and special return on Investment Certificates for the period ending June 30, 1923, will be made as soon after July 1 as the amounts can be computed and prepared for payment. As more than 30,000 employees are taking advantage of the Investment Plan, and the amount to be distributed among them for this period will be in the neighborhood of \$1,000,000, this is no small undertaking.

Instead of paying this interest and special return by check, as heretofore,

Concluded on page 5

Division on the Hudson Has Tremendous Resources

Converts Wasted Energy at Dam Into 8,000 Horse Power; Water Routes for Transport

When the Green Island Plant of the Ford Motor Company is ready to throb to the full measure of its power, it will take its place as one of the dominant factors among the great manufacturing plants of the country.

The potential strength and seemingly unlimited possibilities of the Green Island Division are due to the unusually favorable location. Situated within sight of Troy, the Plant has access to the navigable Hudson and the various connecting canal systems, in addition to fine railroad facilities. Beyond this, there is much land in this section with wonderful opportunities for industrial expansion.

The Plant had its direct beginning when Mr. Ford discovered that the power from the government dam at Troy was being allowed to escape unharnessed. Application was immediately made for permission to construct a hydroelectric plant which could convert this wasted energy into power for the operation of an automobile manufacturing. Work was begun in 1921, and the building, completed, now houses four uniquely designed low-head turbines which are the largest of their type in the world. These operate as "double-current" generators, producing both alternating and direct current. The capacity of the power house is 8,000 horse power.

Land on Green Island adjacent to the dam was bought at the same time the power license was granted, upon which a manufacturing building has been erected, measuring 120 x 1100 feet. It is operated by electricity exclusively, even to the heating, which eliminates the smoke, so objectionable to factories. The property is 189 acres in area.

At the present time, the Division is engaged in the produc-

Concluded on page 5

Ford News

ESTABLISHED 1920

Issued for the employees of the
various Ford Interests.

Vol. II, No. 22

June 22, 1923

PUBLISHED SEMI-MONTHLY

Motto

When a condition actually exists the proper treatment of it is not resentment but understanding. The fact of its existence is a tremendous fact. Existence is more than nine points of the law. Whatever comes as far as that has some rights, at least some rightness, which we cannot very well disregard. Perhaps that is one of the simple truths the misconception of which has spread misunderstanding through the world. We live in an era of tremendous facts. And the facts are facts. They are also unpleasant facts, which does not decrease their factual percentage one bit. Our job is to understand them, to recognize their presence, to learn if we can what they signify and not to fall into the error of minimizing facts because they have a bitter flavor.

—Henry Ford.

Where Are You Going?

A good story with a good application is told in a Southern paper. It is of an old-time Southern "mammy" who, having completed a day's toil at the washtub, stood at the edge of a crowd surrounding a merry-go-round. The gayly dressed young folks who were its chief patrons repeated their wild flights until the last nickel was spent. Dejected, they reluctantly withdrew from the crowd, and were hailed by the old "mammy" with:

"Now, jes look at yo'; youse dun gone and spent all yo' money, an' whah has yo' bin?" How like the thoughtless youths are many who work hard and should be saving for the future. They seem possessed to get rid of their surplus cash without regard to what they receive for it.

Parsimony is not to be encouraged, but the purchase of non-essentials is a waste; and especially in pursuit of objectless pleasure is it a waste not of money alone, but of time and of physical and mental health and strength.

Do not heed the merry-go-round. Bear in mind that the length of usual life on this earth is altogether too short to be spent in traveling in a circle which never takes you anywhere.

Everybody would like to be successful and have a big share of this

world's goods; but there is quite a bit of difference between *wishing* for it and *getting* it.

Let your leisure, your recreation, and your toil have a definite object, and your chances for success will go up 100 per cent.

The Wild Flower Vandal

This is the season of the wild flower vandal. If you do not believe it walk along your nearest main traveled road leading to the larger towns and cities and note the automobiles laden with flowers. Certainly it is a cruel and unwise tribute to the appeal of the wild blossoms, this frenzy for destruction. Annually the flower destroyers strip the trailing arbutus of its blooms—those pink, pearly blossoms freshly opened among the withered leaves of oak and pine needles nestling close to the earth in the forests—often tearing the plant out by the roots in their haste and greed. Later in the season the flowering dogwood suffers from the same depredators. The dogwood is obliged to endure mutilation that a city home may be decorated for a day.

Many of these offenders are well-meaning folk who need only to be reminded that the destruction of wild flowers disturbs nature's balance and encourages the growth of weeds. The change in plant life is followed by a change in insect and bird life, and in this readjustment certain species of insects and adventive plants become pests, do more or less damage, and necessitate expensive control measures.

As in all other forms of conservation, protective legislation may help to preserve the wild flowers, but we must depend mainly upon education. No one wilfully destroys beauty spots. Much will have been gained if the pickers of flowers are taught to take those flowers they want without destroying the roots on which the continuation of the flowers depend. If the people of this country are once aroused to the importance, the value and the necessity of the conservation of the country's wild flowers the net results will soon have a conspicuous place among our greatest assets. Every individual can contribute to the success of the task.



—Kansas City Star.

What Is Success?

*Your Answer May Have Considerable Influence on
Whether You Attain Real Success or Not*

What is Success? The dictionary says, "Success is a favorable or prosperous termination of anything attempted."

That surely seems to cover anything from shining shoes to being President.

Yet no one speaks of the bootblack as a Success though he may be a successful bootblack. And who can say that even election as President of the United States means Success. The man elected may not be a Successful President.

Yet a successful bootblack may be a real Success and an unsuccessful President may be a Failure. Success never means simply the accomplishment of some one thing.

Business success—sales success—professional success—none of these alone mean True Success in its broadest aspect. Such "successful" men may be a complete failure in holding the love of their family or the respect of their friends.

Educational success is not sufficient. Many scholastic successes are "distinguished men" but they too are one-sided in their success. They lack the practical talent or capacity for carrying their ideas into execution.

Religion alone is not enough, "Faith without works is dead" and many a Saint on Earth could not make a Success running a grocery store.

Some men write Success as ~~Success~~. It means they believe Success is dollars and cents—such men are wrong. Instead, cross out all the letters in the word SUCCESS except the "U" and "E." Make those two letters stand for YOU and your ENTHUSIASM and ENERGY and those two letters will spell Success more surely than mere dollars and cents ever can.

So money itself does not mean Success. The world calls many wealthy men successful while they live, but after they die, it reverses its judgment or forgets them completely and honors the grave of some man who was really successful—some man who tried to help his fellow men. The world will long remember Abraham Lincoln though he never accumulated a fortune or built a railroad. The world will never forget the Nazarene though He was only a carpenter's son and never rose to either power or wealth.

Yet money may indicate Success in some line of accomplishment if the possession of money came as the equivalent of Service rendered to mankind. Money gives power for True Success in many other ways—ways which may be remembered by a grateful world throughout all future time. The greater the wealth, the greater the Power for True Success.

"True Success" means the achievement of the greatest possibilities

which your life and your work permit. If the bootblack actually achieves his greatest possibilities throughout his entire lifetime, he is a True Success as well as a successful bootblack. If the President actually achieves the greatest possibilities of his position and of his life, he is a True Success as well as a Successful President. Success is not a single act—it is a continuous performance. There can never be any complete Success while life continues, for you may at any time, any day of your life, completely shatter all the Success you have achieved up to that moment. But if Death comes while you are still "truly successful"—each year after death may even add to your Success.

"True Success"—the achievement of the greatest possibilities of any life—must include Soul supremacy, as well as Material supremacy. Soul supremacy alone may make an Idealist without bringing complete Success. Material supremacy alone may mean "gaining the whole world and losing your own Soul." Both are necessary. Some measure of Material supremacy is necessary as a practical, tangible evidence of Soul supremacy. Some measure of Soul supremacy is necessary to complete any Material supremacy.

Success needs Knowledge and Confidence plus Action. Success needs Ability and Energy plus Character. Success needs Originality and Initiative plus Concentration. Success needs Vital Interest and Enthusiasm plus Intelligent Guidance. Success needs Hope and Belief plus Determination. Success needs Courtesy and Tact plus Service.

ADD these six sums together and SUBTRACT any Physical, Mental or Moral handicap which may turn True Success to bitter failure at any time—the Result will be Success—Real Success, True Success—the Soul Supremacy and Material Supremacy resulting from the realization of the greatest possibilities of your lifetime—whatever you are, wherever you are and whatever you may be doing.

To advance fast, be steadfast.

Wealth is thought. Thought is wealth.

The right kind of fame leads on to fortune, make no mistake about it.

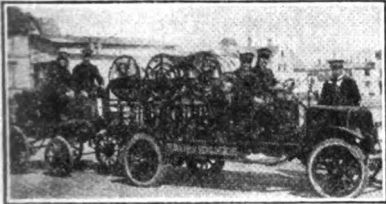
A retiring disposition often is no bar to advancement.

"Unfaithfulness in the keeping of an appointment is an act of clear dishonesty. You may as well borrow a person's money as his time."—Horace Mann.

Many Fords Are Now Used in Iceland

Far-away Country Had But Two Autos Formerly

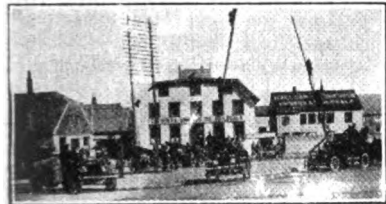
Even in far-away Iceland, Ford cars are in common use. Their success there is emphasized by the fact that only a short while ago the municipal authorities of Reykjavik



Ford equipment proves efficient.

equipped the entire fire department with Ford trucks.

Ford cars in Iceland have become very popular. Before their advent into this cold country only two automobiles were in use. Unsatisfactory results were received due to the complications in operating them and inability to obtain repair parts. Now



The entire Ford fleet out for drill.

there are many Ford products in use on the island.

The accompanying pictures show one of the trucks used as the hose wagon, and a group of the Reykjavik fire department doing some special maneuvers. One of the trucks is fitted for ladder work while a complete life-saving apparatus is carried in another.

What Ideas Have You?

Do you ever have ideas about how you would do things—suggestions as to how the way of doing things might be improved? If so, you're mighty fortunate, because an idea about the right thing at the right time and place can be one of the most valuable things in the world. There could be no progress if men didn't have ideas upon which to build and improve their work. History is a succession of ideas. All great enterprises grew out of ideas; they can grow still greater through the suggestions of those who have good ideas.

It is for these reasons that the Ford News invites employees of the Ford Motor Company to submit any suggestions that might be valuable to the Company. If, in your work, you have discovered a better way of doing things, or a method that would increase efficiency or decrease waste send it to Ford News, Dearborn, Michigan. Contributions will be reviewed in these pages.

Remember—it is the man with ideas who reaches his goal!

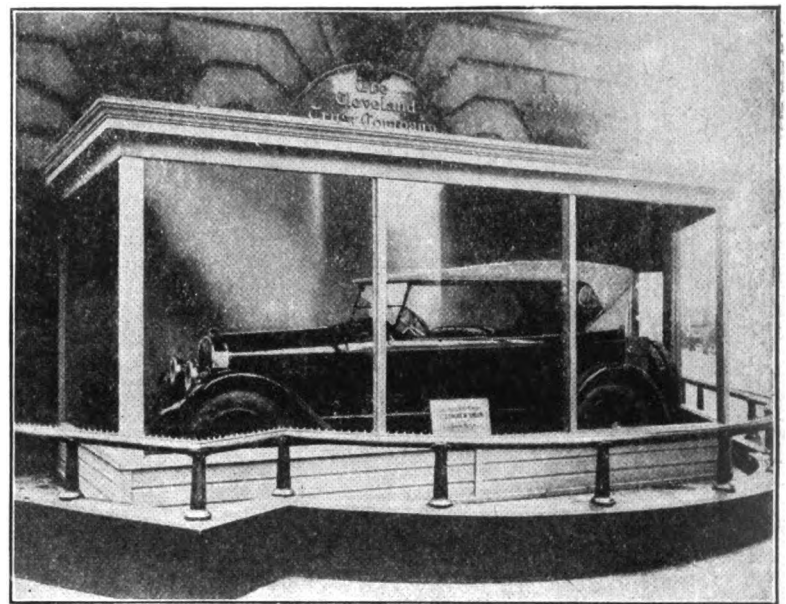
Clever Show That Sold Cars

The Jones-Finney Motor Company, of Cleveland, Ohio, recently held one of the most successful motor shows in the city. The management is to be congratulated on the success of the exhibition and manner in which the product was brought to the attention of prospective buyers. Oriental rugs covered the floors and the light from 16 high-powered lights fastened above brought out clearly the beauty of the display.

Seven hundred fifty people attended the show and more than 200 prospects were secured. Fourteen cars were sold and five

cars were delivered during the show. The cost of the exhibition was more than paid for by the results secured thereby.

A Lincoln Phaeton in its glass showcase in front of the Cleveland Trust Company Building created much comment and interest. This was one of the biggest publicity stunts ever given in Cleveland, as no other company has ever been able to secure this space for the display of their products. This corner is said to be the third busiest corner in the world and consequently the number of people reached by the advertising was enormous.



Ford Trade School Prepares Chinese Students for Career

The Chinese young men in this picture are students taking the Ford Service Course at the Highland Park Plant of Ford Motor Company. There are 100 of them in the class. They have been selected by Dr. Joseph Bailie, of Pekin University. Their object is to learn as much as possible about the processes of manufacture, the care and repair of the Ford car, the Fordson

tractor, and the Lincoln car.

They are working in production departments. When they have mastered the major operations in one department they are moved to another. In this way each student secures each day eight hours of practical shop training.

At four o'clock every Wednesday afternoon the whole group meets in one of the recitation

rooms of the School Building for an hour to discuss some problem of automobile construction or operation.

One of their number, who is a mechanical engineer, conducts a drawing class once a week for 40 of the members. Another leads a class in mathematics.

The members of this group are also organized into a Chinese Students Tractor Club and hold reg-

ular meetings in their club rooms.

These men are dreaming of and working for a new China; a China with good roads and rapid transportation, where want and starvation will no longer exist not far from abundant supplies, a China in which the Ford car and Fordson tractor will play a very important part.

In another year many of these students will be ready for service.



100 young Chinese students who are looking forward to a new China.

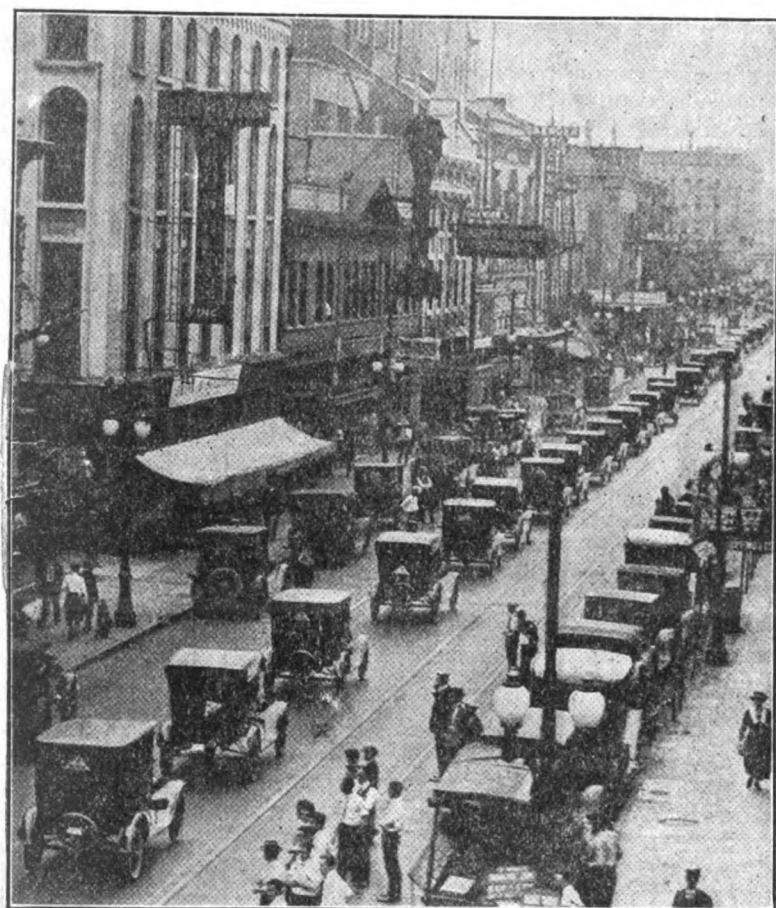
Dealers' Convention Marks Opening of New Building

New Orleans Plant Holds Celebration; Parade Streets

Celebrating the recent formal opening of the New Orleans Branch Assembly Plant of the Ford Motor Company, Dealers of that city and

headed the parade, drawing a trailer with a band, after which followed a Lincoln touring car.

The newspapers were very generous with their publicity, and, in accordance with an invitation extended to the public, there has been a continuous stream of visitors at the Plant.



A few of the 62 "Made in New Orleans" Ford cars that paraded that Southern city.

territory held a two-day meeting which is already evidencing most gratifying results.

A close-up inspection of the new Plant, in addition to several first-rate addresses, developed new ideas and aroused a tremendous increase in enthusiasm among the Dealers and their salesmen, who were also invited to attend the meeting. Increases in sales and larger prospect lists evidence the advertising value of the program, through the means of a parade and "open house" to the public at the Plant itself.

Two hundred and forty-two individuals were present at the Opening Assembly, 179 of whom were Dealers.

The principal business and residential thoroughfares were traversed by the parade, which comprised 62 bright new Ford cars, tagged with "Made in New Orleans" signs and windshield posters reading "Louisiana-Mississippi-Alabama Ford Dealers' Convention." A Fordson tractor

Great things are expected from this section because as a manufacturing city New Orleans has many advantages over other cities. Situated at the mouth of the Mississippi River it has long been the chief commercial center of the South, and in normal times ranks next to New York in exports and imports.

Ford Magneto

Concluded from page 1

tem was recently forwarded to add to this collection. The Ford Magneto is unique in many respects. Because of its simplicity, fool-proofness and the certainty of its operation, it has long been singled out as unusual in car magnetos.

It is the Ford Magneto, of course, which supplies the current for the ignition system. It dates back to 1908, when it was first installed in the Ford car. Marked improvements have been made since that date, both in design and results, but the original

purpose, that of supplying dependable electrical energy, remains unchanged.

The windings, called coils, of which there are 16, are connected in series to produce the highest or maximum voltage. The coils are fastened to a cast-iron support and electrically insulated from it. This assembly may be likened to the armature of an alternating current generator.

Sixteen permanent magnets assembled to a cast-iron plate, but magnetically insulated from it, serve a double purpose: First, of providing the fields on magnetic lines of force, and second, forming part of the fly-wheel.

These two assemblies constitute the Ford Magneto, which may be called a low voltage, alternating current generator.

The coil unit, which supplies the spark for igniting the charge in the cylinders, is somewhat more complicated. It is a secondary induction coil in that it has two separate windings wound about an iron core, one of a few turns called the primary winding and the other of a great many turns called the secondary winding.

The primary winding is connected in series with the magneto and a mechanical interrupter. This interrupter is so designed that it will close the circuit for a definite time by an easy adjustment and will open the circuit at the end of that time as quickly as possible.

A condenser is shunted across the interrupter, not only to prevent sparking at this point, but also to raise the voltage of the secondary winding. The high voltage produced in the secondary winding passes through

the spark plugs in the cylinder head, and its passage between the terminals produces a spark which ignites the charge of fuel and air. The commutator selectively closes the primary circuits, bringing each secondary circuit of unit winding and spark plug into play at the right instant.

Four coil units are used on the Ford car, each cylinder having a separate ignition system.

No wonder a Ford never dies!

Branch Records in Handling Cars

Reports have frequently appeared in Ford News regarding the commendable delivery records set up by the various Branches of the Ford Motor Company. Recently the Memphis Branch was mentioned in these columns for having handled 1,000 freight carloads from and to their Plant the first two months of this year, not a cent of demurrage having to be paid.

Then the Milwaukee Branch attracted attention with their announcement that they had handled 13,571 cars from September, 1921, to May, 1923, and had never paid demurrage on a single car.

Now the Des Moines Branch comes forth with the notable achievement of having handled 23,040 cars between May 1, 1921, and May 1, 1923, without demurrage.

Where does the record go from here?

New Picture Shows Complete Method of Ford Production

Educational Feature "The Ford Age" Being Distributed This Month

One of the biggest attractions Detroit holds for visitors are the huge Plants of the Ford Motor Company. That those who find it impossible to come to Detroit may become acquainted with these Plants the Ford Educational Film has provided such a trip.

"The Ford Age" is the title of the new picture, which has been in process of development for a year. No pains were spared to fulfill the intention that the film should portray fully and clearly the wonders of science and modern machinery used in the production of Ford cars. Full insight into the myriad departments with detailed explanations will make the production of nearly 7,000 automobiles daily a more comprehensible matter.

The motion picture enthusiast will find in "The Ford Age" not only an hour's entertainment, but a very broad education as well.

Besides an exhaustive survey of the actual plants in operation, from the molten metal at the Blast Furnaces to the Final Assembly where the machines are "cranked" by their rear wheels, other absorbing scenes are presented, among them the little building in which Henry Ford built his car. Equally as interesting are the views of the Ford coal mines and forests.

In "The Ford Age" are found the highest attainments of the motion picture photographer's art; the touch of the master hand is evidenced by the artistry of the title and subtitles as well as the varied succession of "shots."

Copies of the film are now being distributed to the various Branches of the Ford Motor Company for showing during this month. Later, "The Ford Age" will be translated for foreign use.

Green Island Plant Has Immense Possibilities

Concluded from page 1

tion of radiators and T-12 ring gears. The men employed number 625, but will be increased when all machinery is installed.

contemplates an extensive program of improvement and development of the waterways of the section, including an all-wa-

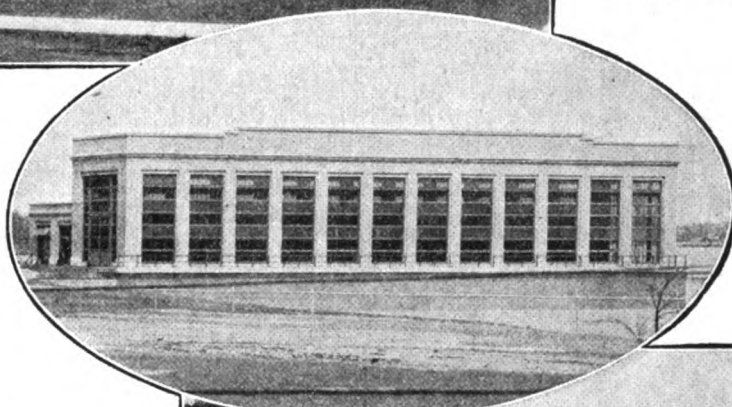
be equipped with cranes and other paraphernalia to be employed in extensive water shipments.

Expansion at the Green Island Plant is to be in keeping with actual requirements. In line with this policy it was announced that a new department for the manufacture of springs will be opened soon, giving employment to 400 additional men.

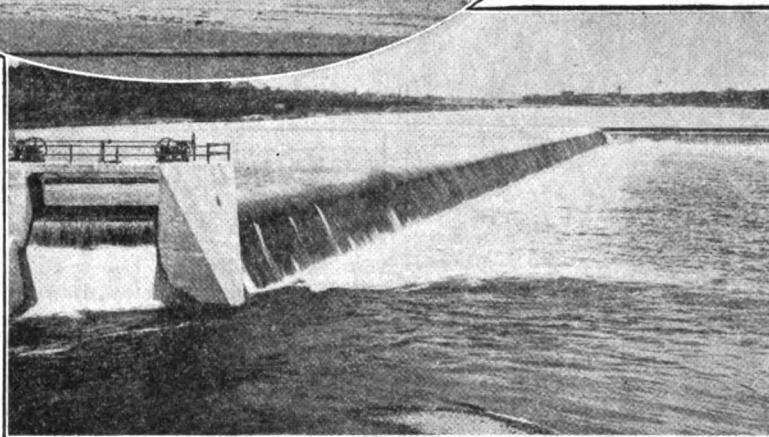
The construction of all the new Ford Plants on sites with abundant water supply is significant of the part navigation and electrical power will play in the future program of expansion and development of the Company.



Above—The manufacturing building at the Green Island Division, looking north. Oval—The power house, showing Troy in distance.



Below—The government dam, the energy of which is converted into 8,000 horse power by four of the world's largest low-head turbines.



In the volume of its production, Green Island will be second only to the Detroit Plant. One of the principles behind the Green Island project is the employment of farmer help during the winter months, permitting them to work their farms during the summer or harvest months.

There is plenty of work for the Green Island establishment to do right now, but because of the lack of machinery and equipment, which manufacturers have been very slow in delivering, production has been immensely hampered.

The Ford Motor Company

ter route to Detroit. The Green Island property will be flanked by a massive concrete water front, and this dock system will

"Water power," to quote Mr. Ford, "is the cheapest, the most efficient, the least wasteful of all types of power."

Certificates Pay in Cash

Concluded from page 1

it has been decided to pay it in cash and include it in the employees' regular pay envelope. The dates of payment will be announced later, and the pay envelopes containing the return on the Investment Certificates will be plainly marked to that effect. Employees on the salary roll who are paid by check will receive their Investment return by check, as will also the employees of The Dearborn Publishing Company, The Dearborn Realty & Construction Company, and the Fordson Coal Company.

The total return at the rate of eight per cent for the six-month period will be paid on all paid-up Certificates outstanding and held by em-

ployes at the close of business on June 30, 1923, according to the length of time the Certificates have been paid up. For instance, a \$100 Certificate paid up January 1, 1923, or before, will draw \$8, while one paid up March 1 will draw only \$5.33, and one paid up on June 15 will draw 71 cents. Those who have started Investment accounts but have not yet completed payment of a \$100 Certificate will not share in this return. Their payments will draw only three per cent until \$100 is paid.

On the famous Liberty Bell, in Independence Hall, Philadelphia, is the inscription: "Proclaim liberty throughout all the land unto all the inhabitants thereof." This is taken from Leviticus 25:10.

Glass Output Increases

Good news from the recently acquired Ford Glass Factory at Glassmere, Pennsylvania, comes in the announcement that a new furnace, grinder and polisher have been installed, which will very noticeably raise production.

The Glassmere Plant, one of the largest in the world, makes about 7,000,000 square feet of plate glass annually, about a third of the requirements of the Ford Motor Company.

Approximately a fourth of the country's plate glass output is used for Ford and Lincoln automobiles. Increasing production of the cars and the growing demand for closed models will still further boost this enormous consumption.

Ford Car Essay Wins First Prize

"Best Car Value" Topic of Contest in London Paper

The *Daily Express*, London, England, recently offered a prize essay on "Which Is the Best Car Value of the Year?" The following, by A. F. Taylor, of the Ford, was awarded joint first prize with another essay on a popular English model:

One thousand nine hundred and twenty-three Ford value is phenomenal and unapproachable. Every modern requirement for personal and professional transportation is satisfactorily met in the Ford range of cars, at a price which can only be called astounding.

Ford cars constitute the best car bargain of 1923 by reason of:

1. The amazingly low price of every Ford model. Ford is the cheapest good-class car made.

2. Mechanical simplicity. Ford is the world's standard of mechanical simplicity—plus mechanical efficiency.

3. The high quality of construction, which goes to make Ford dependability.

4. The low running and repairing costs. Ford will give better service, with less attention, than any other car.

5. The pleasing and attractive designs, especially notable in the closed models. "Roomy comfort" is a synonym of "Ford."

6. Ford service. Standardization of design insures that a worn part can be replaced with a minimum loss of time, trouble and expense; in every district is an agent with a stock of spares. That is Ford service.

These are the things which make every Ford owner a Ford enthusiast—and answer the question of "What is the best 1923 car value?" with: "Ford, of course."

African Cobra Not Appropriate Mascot for Automobilist

Cape Town, South Africa—While making a trip to Belleville, Mr. C. St. H. Courtenay of this city had the "pleasant" experience of having a five and a half foot cobra as a passenger. His attention was called to a hissing sound. The car came to a stop and the trouble appeared obvious according to Mr. Courtenay's story. When he lifted the seat to look at the gasoline tank the cobra puffed his head up and made an effort to strike. Mr. Courtenay dropped the seat and with the aid of a couple of Kafirs succeeded in killing the reptile. Mr. Courtenay was at a farmer's home the preceding day where employees were cutting a hedge and he is of the opinion the reptile took refuge in his car then.

Ford Hospital Laundry Ranks Among the Best

Renders Service to All Ford Interests in Detroit

8,000 Linen Pieces Laundered Daily; Uniforms and Other Supplies Made in Sewing Room

The Henry Ford Hospital Laundry occupies approximately 5,000 square feet of floor space and is situated on the ground floor of the Service Building. The rooms are all light and airy owing to the great number of windows and high ceilings.

Besides the regular hospital linen, all linen from the other Ford interests in Detroit is handled through this laundry. The Ford Motor Company of Highland Park, the Lincoln Plant, River Rouge Blast Furnaces and Dearborn

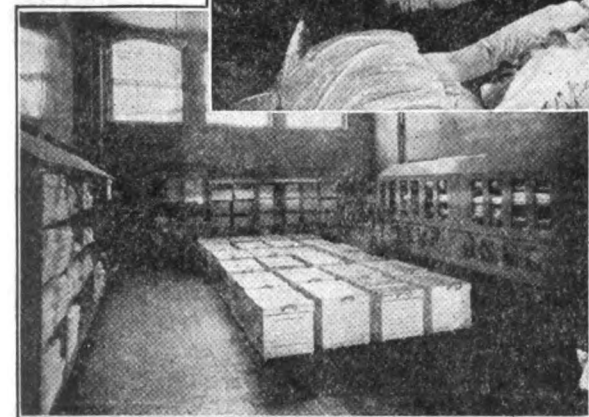
work, and one dry tumbler which is equipped with hot air pipe and fan. This machine dries such articles as Turkish towels, bath sheets, bath robes, bath rugs, cotton blankets, and all linen that does not necessitate ironing. This room is also equipped with a cabinet dry room for drying woolen blankets and other articles that require various degrees of heat.

After linen is washed and ironed it is then taken to the clean linen room and is piled neatly on metal shelving or in metal cabinets with heavy glass doors. This room is the distributing point for all outgoing orders. Requisitions specifying the



amount of linen required for each department or ward are promptly filled in linen boxes, painted white and of uniform size, which are conveyed to their destination accompanied by a copy of the requisition for re-checking.

A sewing room is operated in connection with the laundry. Three power machines and operators are constantly busy repairing linens and making new uniforms and supplies. The following will give the reader an idea of a few articles that are manufactured in this department: T. binders; abdominal binders; Schultetus bandages; supply wrappers of various sizes; abdominal sheets; delivery sheets; drum linings and covers; hot water bottle covers; ether jackets and hose; and a number of other articles necessary to a large institution.



Above—Mangle. Below—Stock room showing orderly arrangement of linen ready for hospital use.

Plant, all having laboratories, restaurants and commissaries, where white linen is worn and used, are furnished with laundry service from the hospital.

There are approximately 8,000 pieces of linen completely laundered daily.

All soiled linen is received into a receiving room separate from the departments in which clean linen is handled. Here it is sorted into metal bins and soaked in large tanks if necessary. From there it is transferred to the wash room which is equipped with three large tumbler-type washers, two extractors or wringers, starch tank, bluing tank and soap solution tank. When this operation is complete the linen is next loaded into box-type trucks and conveyed to the mangle room for finishing. Here it is sorted again and distributed to the various machines. The equipment in this room consists of one large six-roll mangle to handle the flat work, four large steam presses for starch

Radio Programs of Station WWI Catch Season's Lively Spirit

Ether Waves Carry Artist's Selected Numbers; Lectures of Absorbing Interest

At this time of year, all things seem teeming with life. As an integral part of nature, we respond to this spirit, and consequently vivacious music expresses the restless, lively spirit of youth. The WWI program of May 23 was fortunately able to furnish the listeners-in with a number of snappy selections, played by Henkel's Monte Carlo Orchestra. Those who heard the program agree that this orchestra has indeed caught the spirit of the selections it played.

Of universal appeal at all times is a boy soprano. It was a joy to have the privilege of listening to the solos of Mr. Norman Herr, a boy soprano, on this evening. The lovely lyric quality of his voice lent added beauty to the songs he sang, and completely captivated his audience with its charm. Mr. Norman was accompanied by his brother, Mr. Harold Herr, at the piano.

The rich contralto voice of Mrs. Edna Riecks Dawe is well known to our listeners-in. It was indeed a pleasure to hear her in the delightful selections of this evening's program, which included "Wake Up," by Phillips, and "One Sweetly Solemn



Norman Herr, boy soprano.

Thought." The last selection was appropriately the concluding number on this program. Mrs. Dawe was accompanied by Mrs. Norman Giles at the piano.

Concluded on page 8

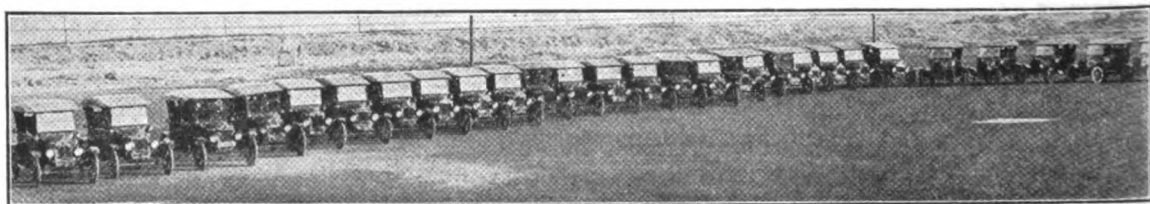
Chicago Police Use 55 Fords

Crime complaints in Chicago were reduced from 25,497 in 1915 to 8,688 in 1922, showing a steady decrease in crime even during the trying period following the World War. Automobile thefts were cut 50 per cent and recovery of stolen cars greatly increased, the number recovered in 1922 being greater than that stolen in that year.

The steady growth of progress in the Chicago Police Department was due largely to the reorganizing of the department and to the use of squad cars. These squad cars are in service 24 hours a day and are so regulated that one or more of them can reach the scene of any crime within a few minutes after the report of a crime is made to the police. These automobiles are manned by members of the detective division bearing records for efficiency and bravery. The department has 55 Ford cars, 20 of them having been put in service during the past year,

and 35 in December, 1922. Each police district has assigned to it one of these cars and the majority of the districts have two of them. These machines are used for patrol purposes, supplementing the foot patrol. Each outfit consists of a chauffeur and two other officers, and, in districts where conditions require it, three officers in addition to the chauffeur. It has been estimated by the department that each of these Ford cars is equivalent to adding 10 officers to each police district. It is easy to estimate the great saving effected in this one instance as the salary of 10 officers would soon pay for the entire fleet of Ford cars used by the department.

There is no reason why other cities, both large and small, could not profit by the experience of Chicago in its effort to give the taxpayer the greatest service for the amount expended.



This fleet of Fords is helping to reduce crime in Chicago.

Eight Rules for Safe Driving

"Yes, I'll go with you if you will promise to drive safely," says the young woman to her escort as he waits at the curb with his new car. And father, as he looks over his paper from his seat on the porch adds: "She's right, John. Be careful."

The expert driver is not always the safest driver. The skilled workman is not always the safest worker in the shop. The champion long-distance hiker may die a jay walker's death. It's the thought we put into our work and our play which determines our success or failure.

The man at the wheel has a re-



sponsibility toward others on the streets and highways which requires the utmost in careful and continual driving. These suggestions for motorists, broadcast simultaneously by the National Safety Council from 60 of the nation's most powerful radio stations recently, should be borne in mind by every driver of an automobile or truck:

1. Always test your brakes before you have gone a block from your garage in the morning—and if the brakes are not working properly, have them adjusted or repaired at once. Never drive your motor vehicle unless the brakes are in safe working condition.

2. Use your horn sparingly and

your brakes frequently to prevent accidents.

3. Always keep 15 or 20—25 feet is better—behind the vehicle ahead of you when traveling at a speed of more than 15 miles an hour. If the vehicle ahead of you strikes another vehicle or stops suddenly to avoid an accident, you will find that you cannot stop quickly enough to avoid hitting it unless you have sufficient distance between you all of the time.

4. Keep a sharp lookout for children and never drive more than 15 or 20 miles an hour when there are children near by.

5. Be sure that your headlights and tail lights are lighted when traveling after sundown. And check up on your headlights to see that they do not glare in the faces of motor vehicle drivers going in the opposite direction. Always dim your headlights when approaching a car going in the other direction on a country road.

6. Always remember that "speeding" is not limited to 60 miles an hour or more. You may be speeding when going 10 or 15 miles an hour in congested districts. The charge of "speeding" implies "excessive speed under existing conditions."

7. Remember that the courteous driver is usually the safe driver. Half of the road belongs to vehicles going in your direction. Give the other fellow his full share.

8. Many accidents will be avoided if we give the other fellow the right-of-way in traffic. Your "right of the road" is of no value or importance after the accident for the damage done is not lessened and the persons injured or killed in a collision are not benefited.

"Say it with Safety—and save the flowers."

Many Accidents Result of Diverted Mind; Branch Alert in Safety Work

The condition of the mind is an important factor in accident prevention. When the mind is troubled, diverted or tired it lacks the alertness necessary to avoid accidents.

An example of this is the case of a workman who some time ago was struck by a large crane magnet and killed. He aimlessly walked into the path of the descending magnet. Legal papers in his possession disclosed the fact that a divorce action was pending. This undoubtedly was on his mind at the time of the accident.

BE ATTENTIVE TO YOUR WORK AND SURROUNDINGS AT ALL TIMES.

The Safety Committee at the Kansas City Branch recently made a tour of the Plant. The several items mentioned in their report were distinct hazards and steps were immediately taken for their correction.

Special mention was made of nails

protruding from boxes and barrels. The condition was so prevalent that a man was assigned to see that all boxes and barrels are properly opened and no nails left in a dangerous position.

The Highland Park Plant has found it pays to take this precaution and the Safety Department is constantly checking up on violators.

Cross Crossing Carefully.

Heed the warning signs.

Make careful and frequent inspections and tests of your brakes.

Stop at the boulevards and through streets.

Give signal before stopping.

Be sure you know the parking rules before parking.

Safety Education Aided by the Motion Picture

Rallies in Big Auditorium Show Immediate Results

Many Men Testify to the Value of Meetings; "New Man" Given Particular Attention

Selling Safety through motion pictures has long since passed the experimental stage, and today is one of the biggest factors in disseminating the gospel of "Safety."

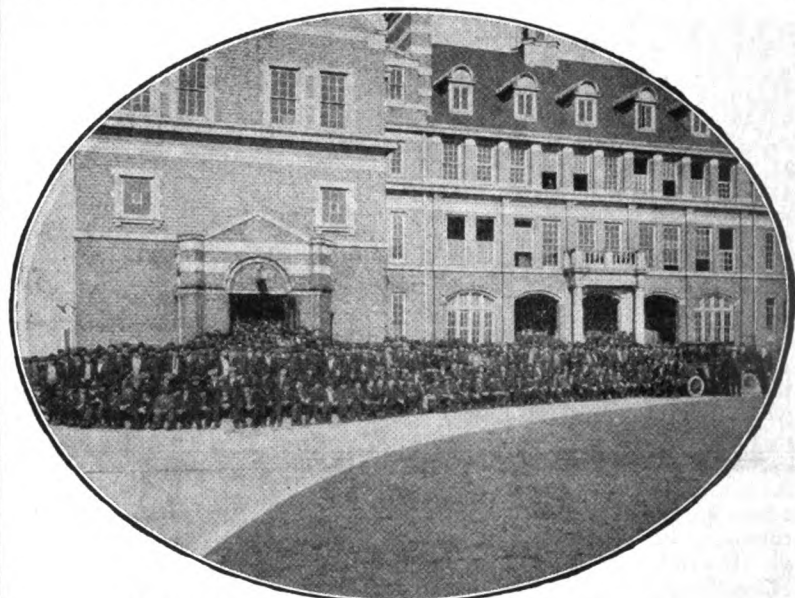
In the big auditorium of the Highland Park Plant of the Ford Motor

had they been properly instructed in Safety practices through the medium of Safety pictures.

One case is worthy of particular notice. At the conclusion of one of the recent rallies in the Ford auditorium, a man requested attention by raising his left hand which was minus two fingers.

"I lost those two fingers in another plant," he said. "If I had had the opportunity before I lost my fingers to view such a splendid picture, I still would have my whole hand."

Such incidents sink deeply into



One of the groups attending a Safety rally at the big auditorium at Highland Park Plant.

Company 43,000 men have been shown the new Ford Safety reel, entitled, "A Study in Ford Safety." Up to this date, and within the period of a year every one of the 67,000 employees will have attended one of those Safety rallies.

The Ford Safety reel, which depicts unsafe practices, inside of the Plant and on the public highway, is accompanied by a comedy picture which supplies zest and variety to the performance.

Generally the foreman of the department who attends the meeting gives a short talk on hazards existing in that particular department, and how to eliminate them.

The close attention paid by the men to the pictures and the favorable comments expressed by them after the conclusion of each performance are ample proof that this method of Safety education is appreciated and is bringing definite results.

It is common knowledge that the men after leaving the auditorium are lining up in a more orderly fashion at the street car terminals. Many instances could also be related of men who have been injured in other places where this method of education is not in vogue, and who emphatically declare that the loss of an eye, a hand or finger could have been avoided,

the minds and hearts of the men and create a healthy sentiment which spells SAFETY in capital letters.

The "new man" has not been overlooked in this educational campaign. Hundreds of men come into the shop every day, many of them entirely ignorant of the value of Safety practices.

The first rally for these men was held in the auditorium on Friday, March 23, and since that time 7,800 "new men" have been instructed in Safety through the medium of the motion pictures.

An active Safety Campaign with the aid of motion pictures is also carried on in all of the large Assembly Plants of the Ford Motor Company in the United States, and a number of enthusiastic rallies have been held in New Orleans, Houston and at Hamilton, Ohio.

A "Movie Room" with a seating capacity of 200 has been recently installed in the River Rouge Plant. Rallies are held every day and will be continued until the 37,000 employees have had an opportunity to view the pictures. The results obtained so far have been very gratifying.

The picture shows the men leaving the Safety Show at the Highland Park Plant during Safety Week; but every week is "SAFETY WEEK" throughout the Ford Industries.

WWI Programs

Concluded from page 5

and three preludes from Chopin.

Eugene Field's "The Night Wind," set to music by Roland Farney, was charming as sung by Miss LaNore Bruder. Miss Bruder also sang three other delightful selections which were much appreciated. She was accompanied by Miss Marian Winkler.



Miss LaNore Bruder

As popular numbers on this program, Mr. Ernest Fassio, whose concertina music is always enthusiastically welcomed, generously played a number of present-day favorites, among them, by special request, "Three o'Clock in the Morning."

Most of us are more or less familiar with experiments that are being carried out with insulin, the new-found treatment for diabetes mellitus. Dr. Irvine McQuarrie gave an enlightening and timely talk on this subject, which will be found of vital interest. It is Talk No. 66, and will be sent free of charge to those who send a request to Ford News, Dearborn, Michigan.



Miss Marian Winkler

Future Programs Station WWI

July 5, 1923.

Commencing at 8 p. m.

Orchestra Selections—*Just Stiel Kela Bela*, Overture; *Stella*, Bennie Davis; *Who's Sorry Now?* Ted Snyder; by Ford Motor Company Band.

Vocal Solos—*Absent*, Metcalf; *Carry Me Back to Old Virginny*, Bland; by Jack Middlewood, boy soprano.

Vocal Solos—*Moonlight and Starlight*, Gilbert; *Dreaming Time*, Lilly Strickland; by Mrs. Alvah Brachman, accompanied by Miss Maude Gregson at the piano.

Health Talk—*Water as a Health Factor*; by Dr. E. C. Davidson, Department of Surgery, Henry Ford Hospital.

Orchestra Selections—*You've Got to See Mamma Every Night*, Billy Rhodes; *Mellow Moon*, Wendell Hall; by Ford Motor Company Band.

Ukelele Solo—*Don't Leave Me This Heart*; *La Paloma*; by Mr. Bailio Nuesca.

Vocal Solos—*Morning, Oley Speaks*; *Grandma*, Facht; by Mrs. Alvah Brachman, accompanied by Miss Maude Gregson at the piano.

Steel Guitar Solo—*Manila Memories*; *Give Me Your Heart, So I Give You Mine*; by Mr. Bailio Nuesca.

Vocal Solos—*Rose in the Bud*, Dorothy Forester; *Mother Machree*, R. J. Young and J. Ball; by Jack Middlewood, boy soprano.

Orchestra Selections—*Down by the River*, Creamer and Layton; *Ten-Ten-Tennessee*, Joe Young; by Ford Motor Company Band.

July 11, 1923.

Commencing at 8 p. m.

Tenor Solos—*Beloved, It Is Morn*, Aylward; *Love's Garden of Roses*, Wood; by Mr. Joseph Atkinson.

Bagpipe Music—*Seventy-ninth Farewell to Gibraltar*; *Midlothian Amateur*, pipe band march; by Highland Park Highlanders.

Soprano Solos—*Faded Love Letters*; *Take Me Back, Caroline*; by Miss Dale Bostwick, accompanied by Miss Louise Manin.

Travel Talk—*Alaska*; by Rev. R. Crissman.

Bagpipe Music—*Bonnie Dundee*; *Highland Laddies*; by Highland Park Highlanders.

Soprano Solo—*Through the Night*; by Miss Dale Bostwick, accompanied by Miss Louise Manin.

Piano Solo—Selected; by Miss Louise Mauin.

Bagpipe Music—*McKenzie Highlanders*; *Strathspey Reel*; by Highland Park Highlanders.

Tenor Solos—*Duna*, McGill; *Abide with Me*, Liddle; by Mr. Joseph Atkinson.

Electrification of D. T. & I.

Concluded from page 1

Power House. The pressure on the power transmission line will be approximately 150,000 volts, the trolley line carrying 22,000 volts.

The new Ford line, the Detroit & Ironton Railroad, to be operated in conjunction with the Detroit, Toledo & Ironton Railroad system, is now making rapid strides toward completion. The construction work is assuming huge proportions. This new road will be the first division to be operated with electric motive power. The line is to be double-tracked and will connect the Rouge Plant of the Ford Motor Company with the Detroit, Toledo & Ironton Railroad north of Flat Rock, Michigan. Although the Detroit & Ironton Railroad is to be but 13¼ miles long, it will effect enormous savings in switching charges between the Rouge Plant and the present Detroit, Toledo & Ironton Railroad terminus.

A large amount of work has been necessary on the division between the Rouge Plant and Oakwood Boulevard in making fill for approaches and on construction of a temporary trestle over the Rouge River. This trestle will be replaced with a reinforced concrete bridge.

One very expensive feature of railroad construction is eliminated in connection with the Detroit & Ironton Railroad by the use of refuse sand from the Rouge Foundry for grading purposes. The tracks are being laid with 100-pound rail and creso-tied ties. Each tie will be protected with tie plates which greatly adds to the life of the ties as well as forming a more secure track.

At present a force of two hundred and twenty-five men are engaged in rushing this work to completion and it is expected that the latest addition to the Ford Railroad interests will be operating in its entirety by October 1, 1923.

In connection with this line, which may eventually become part of the main line of the Detroit, Toledo & Ironton Railroad, extensive receiving and classification yards are being built immediately below the Detroit & Ironton Railroad at Flat Rock. In these yards all incoming trains will be broken up and arranged for dispatch, thus expediting the delivery of shipments to the consignee.

Mosul, the center of the rich Mesopotamian oil fields, is 70 miles from a railroad.

Original Sales Plan Gets Business

New Orleans Branch City Dealers Roll Up Enrollments

Credit is due the city dealers under the New Orleans Branch for introducing a new and original sales plan.

If, in New Orleans, you should happen some sultry morning, any time between seven and nine o'clock, to be standing by the curb patiently waiting for the street car which was to take you to work, you would more than likely be offered a ride to your destination. If you accepted you would get into a new Ford touring car which, according to the sign thereon, is being driven by a Ford salesman. Your curiosity might also be piqued by a poster on the windshield mentioning the Ford Weekly Purchase Plan.

The salesman does not long leave you in doubt as to the nature of the plan nor the many benefits derived from the ownership of a Ford. And long before you begin your day's work you are quite convinced that you need a Ford of your own, and without further delay you either place your order or enroll in the Weekly Purchase Plan.

The New Orleans Branch has fifty new touring cars out on the streets doing this work. Each car transports on an average of twelve passengers during the two-hour period. Approximately forty per cent of these passengers are good prospects for Ford products. The Universal Auto Company obtained recently three enrollments and an order for immediate delivery of a Coupé as the result of one morning's work.

Many Savings at Ford Stores

Bread made from Ford Whole Wheat Flour, also bread made from Ford Bread Flour, is now on sale at the Ford Store at.....\$0.09

5-pound jar pure fruit preserves 1.19

Cream of Wheat..... .19

Shredded Wheat..... .10

Post Bran Flakes..... .11

Kellogg's Bran Flakes..... .09

Campbell's Beans..... .09½

Campbell's Soups..... .09½

Hershey's Cocoa, 1 pound..... .25

Pure Honey, 5-pound pail..... .83

Premier Salad Dressing..... .35

Jell-o, all flavors..... .09

Bartlett pears, 2-pound can..... .25

Del Monto Melba peaches, large can31

Ford Ammonium Sulphate Fer-

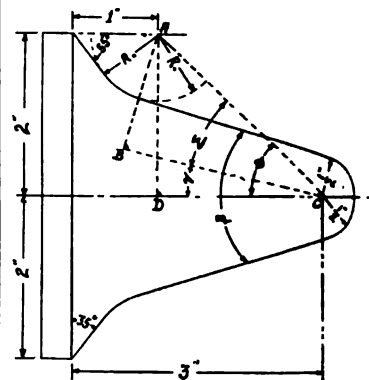
Problems

If there are explanations or comments regarding problems, write the Henry Ford Trade School, Ford Motor Company, Detroit, Michigan.

Solution to last issue's problem:

No. 62

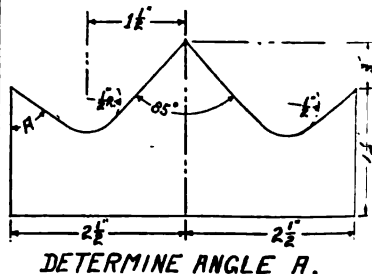
The following drawing has been purposely distorted to bring out details.



DETERMINE ANGLE β .
 $R = \text{SINE } 55^\circ \text{ OR } 819/5 \quad \beta = 2^\circ$
 $AB = R + 5 = 1.3191 \quad CD = 3 - 1 = 2$
 $\text{ANGLE } \theta = 45^\circ$
 $AC = CD / \text{SEC. } 45^\circ = 2.8284$
 $\text{SINE } Z = AB / AC = .46639 \text{ OR } 27'48''$
 $\text{ANGLE } \gamma = \theta - Z = 17^\circ 11' 59''$
 $\text{ANGLE } \beta = 2(\text{ANGLE } \gamma) = 34^\circ 23' 58''$

Try This

No. 63



DETERMINE ANGLE α .

tilizer now on sale at the Ford Store. 5 pounds, .25; 10 pounds, .45.

Drugs.

Lysol19, .38, .75
 Seidlitz powders, box of 10.... .15
 Rubbing alcohol, 1 pint..... .40
 Oil of citronella, 2 ounces..... .25
 Peterman's Liquid Discovery... .21
 Williams Talcum Powder 2 for. .25
 Peroxide of hydrogen, 1 pint... .20
 Spirits of camphor, 4 ounces... .35
 Surgical iodine, 4 ounces..... .25

Rapid Progress Made on Building

The excavating for the new Ford Motor Company Engineering Laboratory and Dearborn Publishing Company Building at Dearborn has been completed. The cement work on the end walls is completed and the two side walls are well under way. A portion of the floor at the north end has been poured. The work is progressing rapidly.

Ford News

Volume III. L

Dearborn, Mich., July 1, 1923

No. 17

New Turbines at Rouge Among World's Largest

**Will Furnish Current for First Unit of the
D., T. & I. to Be Electrified Under
New Plan**

Rapid progress is being made on the new equipment at the Rouge Power House, which will furnish power for the electrification of the first unit of the Detroit, Toledo and Ironton Railroad.

The original boiler capacity consisting of four boilers rated at 2,647 horse power but developing more than 6,500 horse power each is being doubled. The present generating system consisting of two 12,500 kilowatt turbine generators is being replaced by eight turbine generators each rated at 30,000 kilo volt amperes. The steel work on three of the giant stacks is already completed and one of the turbines, among the largest in the world, is also nearing completion.

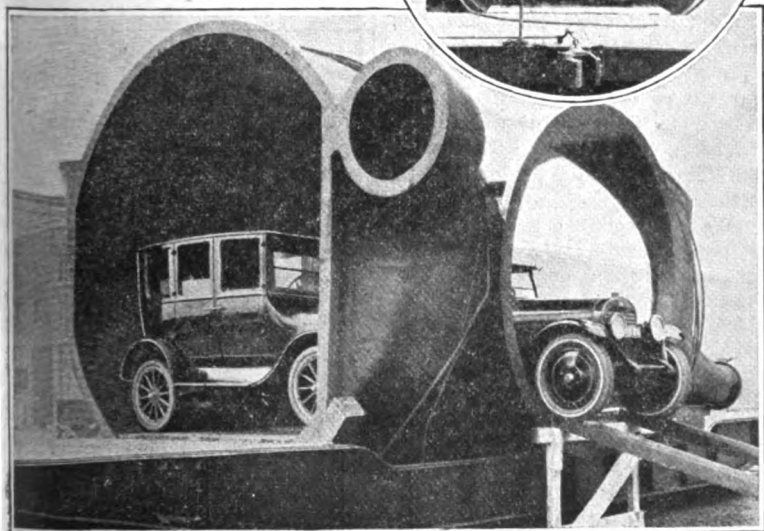
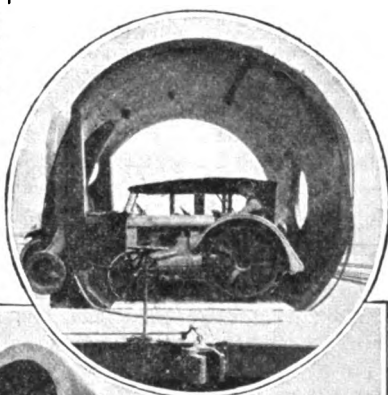
The present plans which will mark a new era in the history of the Detroit, Toledo and Ironton Railroad, in addition to the installation of the big turbine units at the Rouge Plant, call for the building of new locomotives, the construction of 13¼ miles of double track between River Rouge Plant and the Flat Rock yards and many other changes incidental to the electrification of the line.

In keeping with the general improvements that the Detroit, Toledo & Ironton Railroad has undergone under Ford operation, electrification will give the road a vastly superior motive power. The electric locomotive

is much more powerful than the steam locomotive, and is approximately fifty per cent cheaper to operate. It is capable of rendering practically continuous service, and can be inspected in one hour, whereas the steam engine requires several hours. Moreover, the electric locomotive becomes a generator on a down grade, putting current back into the wires, thus utilizing the otherwise wasted energy of inertia and gravity.

The new electric locomotives for the Detroit, Toledo & Ironton Railroad for freight service will weigh 360 tons, and have a normal capacity of 4,000 horse power, and be capable of producing 5,000 horse power for an hour. They will have 16 driving axles and will develop 108,000 pounds drawbar pull at twenty-five miles an hour. The maximum speed will be forty-five miles an hour. The power will be supplied by the River Rouge

Concluded on page 8



A triumph in casting: one of the eight huge condenser shells for the new steam turbines being installed at the Rouge Plant. Weight 36 tons, length 22 feet, inside diameter 14 feet. The casting easily housed a Ford, a Lincoln and a Fordson.

Company Enters Its 21st Year

*Holds Unique Position in
Automotive Industry
of Country*

Evolved from a humble beginning based on Henry Ford's faith and grown to wonderful realization, the Ford Motor Company passed into its Twenty-first Year on June 16, 1923, enjoying the greatest prosperity of its history, and in the midst of even greater plans for development.

In the score of years that have passed since its incorporation on June 16, 1903, the career of the Company has been marked by events of far-reaching importance to the industrial world. Distinctly individual manufacturing methods, production of primary raw materials, minimum wage scale, decreases in sales prices, are only a few of the features that have given the Company its unique history.

In connection with the tractor, Mr. Ford's dream has been to "take the load off the backs of men and put it on to metal. If I can do that I shall have rendered a great service to humanity."

It is a matter for congratulation that half of the cars being driven today are from Ford Plants.

Soaring Output at Ford Plants

Weekly Records Show Consistent Increase in Production

Highly increased output to the total of 40,375 cars and trucks for the week ending June 19 was the Ford Motor Company's twentieth birthday message to the world. This represents the highest weekly record ever attained in the automotive world, and is twenty-nine more than the high Ford record the previous week.

On June 13, three days before the Company's twentieth anniversary, a new high daily record was established, when 6,817 cars and trucks were turned out. This eclipsed the high mark of the preceding day by 36.

The Lincoln Division of the Ford Motor Company kept its production high by turning out 171 cars. This figure will be considerably increased when the new addition is completed

Concluded on page 4

Ford Mines See Changes

**Coal Properties Being
Brought to Highest
Standard**

**Living Conditions Undergoing Great
Improvement; New Equipment
Installed**

Corresponding to the high standard of efficiency to be found throughout all of the Ford interests, the coal mining properties, which were recently incorporated as the Fordson Coal Company, are undergoing many improvements.

At the Banner Fork Plant, which was the first coal plant acquired by the Ford Motor Company, twenty substantially built four, five and six room houses, complete with baths, electric lights and all modern conveniences, have recently been finished. Each house has been fenced to itself in both camps at this plant; hard-surface roads have been built throughout the camps and the concrete sidewalks will soon be completed. A hard-surface road from Wallins Creek, Kentucky, to Tisdale, Kentucky, Plant No. 2 of the Banner Fork Plant, has also been constructed.

At the Nuttallburg Plant, situated at Nuttallburg, Fayette County, West Virginia, which was the second plant acquired by the Ford Motor Company, a new 300-kilowatt motor generator has been installed in the mines. This installation will largely facilitate production at this plant, which was closed from October, 1921, to November, 1922. In November, 1922, the overhauling of the plant was begun and the inside of the mines has been put into splendid condition for substantial production. The voltage was changed from 550 volts DC to 275, as new equipment had to be purchased for this mine throughout and the latter voltage is much safer in operation. A new commissary and office building has just been completed and the overhauling and painting of the camp, and many other needed changes and improvements are progressing rapidly.

At Twin Branch Plant, the third mine acquired by the Ford Motor Company, a new spur track up to a new tippie site, one and a quarter miles up Twin Branch Hollow, is under construction. This spur will reduce the haulage and increase production. Plans are now being perfected for the installation of a power

Concluded on page 5

Ford News

ESTABLISHED 1920

Issued for the employees of the
various Ford Interests.

Vol. II, No. 22

July 6, 1923

PUBLISHED SEMI-MONTHLY

Motto

When the nation was born it drew its wisdom from the common life, and when the national principles became established and it seemed safe to leave the nation's affairs in the hands of the constituted officials, the wisdom of the common life began to circulate through other veins of the nation's interest. Government has not been the main interest, has not claimed the main strength of this nation for a number of years. Now, however, because of the need, the strength and wisdom of the nation is again flowing back toward Government, and it is not welcomed. When the people begin to think of their country and to offer it their accumulated wisdom, it is sheer folly to interpret their interest in terms of politics. Had there been less politics, there had been less need for popular concern today.

—Henry Ford.

Kicking Won't Bring Tax Reduction

Taxes are too high. There is no question about that. But not one in 10 complaining ever does a thing to reduce them, or understands in what respect they are too high. Are you that one, or are you one of the "kickers"?

Your state taxes go to maintain educational, judicial, charitable and penal institutions, courts and law officers, and to carry on the administration of public affairs. These uses for funds to which all contribute are essential. The problem is to reduce their cost without impairing their efficiency.

Yet the nine in ten who "kick" spend more in useless indulgences than their state tax amounts to.

The county tax is levied to provide for the expenses of administration and the building and upkeep of courthouse, jail and county house.

Township taxes provide for local work, school taxes for education, and village taxes for local needs.

But these purposes do not complete the call upon your purse, for the budget includes one big item—interest—upon indebtedness the voters have authorized, hence they are themselves responsible.

Are any or all of these purposes

worth their cost? Which would you eliminate from the budget?

Could you be secure in your home, have the conveniences and benefits of modern housing, educate your children—in fact enjoy civilization—if you and others did not contribute to the public treasury to meet their cost?

Government taxes are paid indirectly by the ordinary citizen. Every time you buy an article of any kind, it in some way adds to the amount the government receives through its levies on foreign or domestic production. Every indulgence you pay for, and most of us spend in the aggregate more money for useless habits in a year than we contribute to the local treasuries in direct taxation, carries with it a tribute to the nation.

We complain of high taxes, perhaps with a measure of justice, yet do nothing to reduce them, either in the selection of officers or in opposing special projects proposed by interested parties. We vote bonds without stint, carrying our taxes to a point where they oppress, and blame the assessing officers, who must provide the funds.

The Best Land

By Edgar A. Guest

If I knew a better land on this glorious world of ours,
Where a man gets bigger money and is working shorter hours;
If the Briton or the Frenchman had an easier life than mine,
I'd pack my goods this minute and I'd sail across the brine.
But I notice when an alien wants a land of hope and cheer
And a future for his children, he comes out and settles here.

Here's the glorious land of Freedom.
Here's the milk and honey goal
For the peasant out of Russia, for the long subjected Pole.
It is here the sons of Italy and men of Austria turn
For the comfort of their bodies and the wages they can earn.
And with all that men complain of, and with all that goes amiss,
There's no happier, better nation on the world's broad face than this.

So I'm thinking when I listen to the wails of discontent,
And some foreign disbeliever spreads his evil sentiment,
That the breed of hate and envy that is sowing sin and shame
In this glorious land of Freedom should go back from whence it came.
And I hold it is the duty, rich or poor, of every man,
Who enjoys this country's bounty to be ALL American.

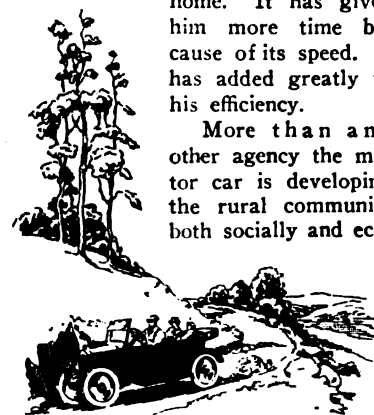
—Copyright, 1923, by E. A. Guest, reprinted by special permission of Mr. Guest's publishers, Reilly & Lee Co.

A Rural Transformation

*Farm Life and Business Have Been Revolutionized,
and the Automobile Is Responsible*

The last decade has witnessed the transformation of rural social and economic life—and the automobile is responsible. The era of an occasional husking bee, barn dance or quilting party has passed and in its place has come a period in which no element but available leisure limits the farmer in satisfying his social desires. The automobile has eliminated distance as a factor in keeping the farmer at home. It has given him more time because of its speed. It has added greatly to his efficiency.

More than any other agency the motor car is developing the rural community both socially and economically and it is only well started.



Consider what it meant 10 years ago for a farmer to indulge in very many social activities. He had to stop work early to feed the horses and get the carriage out and greased up. The wife had to hurry around and clean up the house and get the youngsters dressed and then watch Jim to see that he did not run out in the mud while she was washing and dressing Tom and Dick.

Then there was a long drive with a slow team, usually over a bad road to town or to the schoolhouse. Community meeting houses formerly were things unheard of. If the season happened to be winter there were stones or bricks to warm to ward off the possibilities for frosted toes, and when the meeting was over there was the long drive back home and then lanterns to light and the team to unhitch and bed down for what was left of the night. All this was to be done if the family was to have any social life at all. Small wonder that there was little of it practiced in those days.

What a contrast to today when all one needs to get a gathering of farmers is to announce a time and a meeting place and a topic of reasonable interest for discussion. It is indeed a poor attraction which will not draw from 50 to 100 farmers and their families. Where they formerly might have assembled from a distance of two or three miles, they now come from 10 or 15 miles with less effort than they came short distances a few years ago. There is only one thing which has brought about the change. It is the means of conveyance. The automobile has performed

for the rural community an excellent service.

There is another way in which the automobile is serving the farmer every day. It is in his business. Only a few years ago, it was customary to wait until Henry Jones happened to come by the farm that Farmer Brown would make Henry a bid on some feeder cattle offered for sale. Maybe the price had dropped or risen considerably during the week that Farmer Brown had waited and somebody lost some money. Today, Farmer Brown can step into his car and within half an hour be at the farm of Henry Jones; close a deal with Henry and be back in the field within less than an hour.

Again, during harvest, a pinion gear on the binder breaks when the work is at its height. There are plenty of repair parts to be had at the hardware store in town but that is 10 miles or more away. Formerly Mr. Farmer with the broken pinion was out of luck but today he needs only to crank up his car and within an hour can go to town and return with the repairs and the binder is soon humming busily away at its work. The same trip with a team would take up nearly a whole day and may have cost the man several hundred dollars, due to the delay. Yes, the automobile has been a great thing for the busy farmer both in a social and a business way.

There are other ways in which the motor car is serving the rural communities every day of the year. In case of sickness, a doctor in a motor car may reach a patient in one-tenth the time it took him a dozen years ago. The unfortunate farm laborer who catches his hand in the feed grinder can be rushed to the hospital almost as quickly as the city factory helper who meets with misfor-



tune at his daily labor. No doubt, the automobile has saved thousands of lives in just this way.

The automobile has been instrumental in giving the farmer a road over which he may travel the greater portion of the year. It has also put him 50 per cent closer to his neighbors, and he is now able to become better acquainted and pick up new ideas and methods for the betterment of his own business. The farmer owes a great debt to his motor car. —Frank A. Meckel, in *The Nebraska Farm Journal*.

Lincoln Shows Power in Chicago-Indianapolis Run

**One Hour 16 Minutes
Better Than Former
Record**

A Lincoln stock touring car, with only the top and windshield off, driven by E. G. "Cannonball" Baker, set a new round-trip road record between Indianapolis and Chicago, recently, making the distance of 380.8 miles in 7 hours, 43 minutes, and 15 seconds. The former record of 9 hours was established December 2, 1917, by Ray McNamara. Baker's record will be hard to beat as it shortens the former time by 1 hour, 32 minutes and 15 seconds—and the former record stood for more than six years.

Baker also broke the one-way record established by himself in 1916 in a special built job over the same course by completing the return trip from Chicago in 3 hours, 41 minutes and 15 seconds, 45 seconds faster than the old mark. Chester S. Ricker, Indianapolis Motor Speedway official, was the official timer for the Lincoln run.

With plenty of power for hills and heavy pulling, and the swift, smooth, silent pick-up that is possessed by the Lincoln, this car has demonstrated definite and unequalled superiorities over other makes. Is it any wonder that Lincoln owners are satisfied owners? And keep in mind the fact that the above test was made with a stock car and not a special. The owners of Lincoln cars are loud in their praise of its extraordinary features of construction and comfort. They admire its reliability and efficiency and are proud of its graceful lines. And tests like that made by Mr. Baker prove to the owner of a Lincoln that under the comfortable body of his car is a chassis which makes friends where going is hardest, and difficulties greatest.

Branches Hold Motor Classes

Instruct Mechanics on Lincoln Engine

This is one of the Lincoln mechanical classes that are being held by various Ford Branches for the benefit of their Dealers. These have been only recently established and are becoming quite popular. The picture shows the class held by the St. Louis Branch. Nine different St. Louis Branch Dealers are represented in this photograph. The two men in the



back at the extreme right are instructors of the Ford Motor Company.

Dealers were selected by the St. Louis Branch with regard to the importance of their location and the number of Lincoln cars in their district. Most of the mechanics were strangers to the Lincoln engine, but after a couple of days instruction they considered the Lincoln the "last word" in modern automotive power.

Dealers who sent mechanics to the instruction course were: Price Motor Company, Johnson Motor Company, Ruperechet Motor Company, Downs Motor Company, Tevis Motor Company, Ayers Motor Company, Kuhs-Weimer Motor Company, of St. Louis and Broadhead Motor Company, East St. Louis, Illinois, and J. G. Starr and Sons, Decatur, Illinois.

The Diagnostic Clinic of the Henry Ford Hospital

*Clear Knowledge Based on Reliable Information
Is Idea Underlying Clinical Diagnosis*

By FRANK J. SLADEN

Physician-in-Chief

To emphasize that the care of the sick necessitates a clear knowledge of the character of their illness and its cause is making a statement which is perfectly obvious to every one. Not so many years ago, much of the care of the sick was in the nature of meeting their symptoms one by one and attempting to relieve them. This is called symptomatic treatment. Even yet it is employed in some instances for the want of a better plan. With advancing knowledge, however, responsible care of the sick involves so much more. First, where necessary, immediate relief must be obtained by such treatment of symptoms. Second, when the condition of the patient allows it, more fundamental consideration must be given to the cause of the trouble and the elimination of such a cause. Third, many troubles leave behind them scars and other forms of residual distress to which the patient's life must be properly adapted unless the scars can be eradicated. Such thoughts about the care of the sick are incomplete without a realization that these experiences give birth to a great desire to do something to prevent similar trouble in someone else. So one sees in a nutshell the mental processes leading to symptomatic treatment, to removal of the cause, to reconstruction in medicine, and finally to prevention of disease.

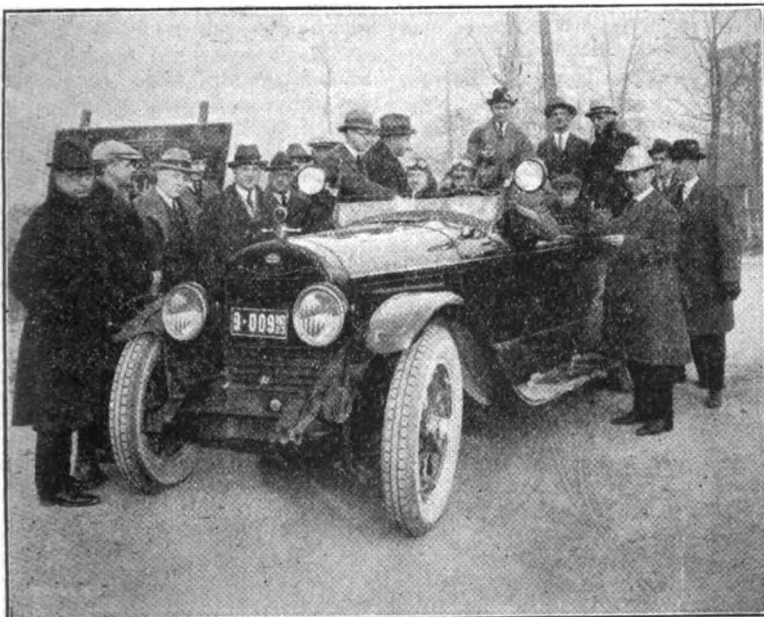
Underlying all of this, in every individual instance, is the primary need of a clear-cut, inclusive appreciation of the individual patient from all points of view. The structure of his body and the character of the chemical processes going on in it have no more relative importance than his state of mind and his habits of eating. In other words, in the case of a new patient or even an old patient after a lapse of time, the first need is to become fully acquainted with the complex organization known as the human body and its functions.

The structure and functions of the human body resolve themselves into a series of remarkably co-ordinated organs and systems, each one of which is peculiar in itself in its form, its activity, its purposes, its necessity, and its relations to any or all of the others. It is fair to say that the life work of one scientific man could well be devoted to the problems of one organ—even more, a whole life's endeavor has not infrequently been spent upon one type of abnormality affecting such an organ. There is no more wonder that this complicated assembly should work so satisfactorily for most people than that any one man could hope thoroughly and completely to understand it all.

If the human body is such an ideal organization, it could well be used to serve as the model for a clinic designed to understand it in its normal and abnormal conditions. That is to say, if there is an eye in the human body, then in a diagnostic clinic there should be someone serving as a source of knowledge in regard to the eye. If bones and joints are necessary in the structure of the human body, it is essential that the diagnostic clinic include a real source of information in regard to bones and joints. And so in turn a diagnostic clinic, to be ideal and inclusive, should represent a source of specially interested and understanding information of every different structure and function of the human body, of every organ and system of the body. In a word, the best graphic chart of a well-balanced diagnostic clinic would be represented by a picture portraying the structure and functions of the human body.

The need of special skill has led to some very general divisions of medical work, namely, medicine as contrasted with surgery, obstetrics as representing the care of a physiological event, childbirth, in contradistinction to both medicine and surgery, and finally laboratory work. These divisions might well be said to have their basis in the treatment of patients. Many departments of the body lend themselves more predominantly to surgical treatment and many, as the heart, almost entirely to medical treatment. So, in the traditional development of medical organizations, diagnosis has followed treatment and certain groups of troubles have come to be known as medical troubles and others as surgical troubles for both diagnosis and treatment. No hospital organization is very successful which does not make the resources of both easily accessible to patients.

With this introduction, the plan of the Diagnostic Clinic of the Henry Ford Hospital is easily understood. The new patient is sufficiently interviewed to permit classification as medical, surgical or obstetrical. In these departments, sufficient history, physical examination and laboratory work is performed to indicate the use of more specialized examinations and tests as suggested in each individual case. This leads to an assembling of parts, as it were, the opinions of the various necessary specialists, to form a completed product, the diagnosis. According to the case, it may be necessary to have investigations and opinions from the eye, ear, nose and throat section, the neuro-



Lincoln stock touring car with E. G. "Cannonball" Baker behind the wheel.

Children Get Ford "Pullman"

When the 20 or more little kiddies, comprising the Jolly Entertainers group from the Children's Home at Des Moines, Washington, begin their annual tour of the state next month, they will travel with a fine equipage.

A veritable cottage on wheels has been constructed and is in readiness for the little folks on their journey. The big vehicle, mounted on a Ford chassis and designed under direction of "Daddy" Draper, director of the Children's Home, is surprisingly complete.

Not only will the small entertainers travel in the roomy big bus, but

they will sleep in it whenever they find it necessary to remain away from home. There are plenty of comfortable "bunks" to accommodate the whole troupe. In addition there are two water tanks, stove for heating or cooking, cupboard for dishes and eats, racks for schoolbooks, magazines, wraps, hats, and so on, and boxes for horns, luggage and bedding.

The bus itself will sleep 14 boys and another truck, with trailer, will be used for baggage and sleeping quarters for a dozen girls.

Plans are made for an extended tour south, through California.



Safety Notes---Here and There Among the Plants

Since the report was circulated that the fire team at Columbus arrived on the fourth floor one-half minute after alarm was sounded, several branches have endeavored to better the record.

The Houston Branch, within a few seconds after alarm is sounded, has a team on each floor ready for action.

Every employee should know that, in the event of fire in paint departments, the following precautions are to be taken in addition to those generally followed:

1. Pull electric switch on ovens
2. Close lids on paint tanks
3. Close windows.

Not long ago a belt man became drowsy at 2 a. m. and used a "Grass Hopper" furnace for a bed. It was not in use at the time and he thought it would afford comfortable sleeping quarters.

At 3 a. m. he was rudely awakened by excessive heat exuding from the furnace, which had been put in operation.

Not only was this employee remiss in his duty; he was also careless and thoughtless. This illustrates how 80 per cent of our accidents occur.

A fire door is a metal roll door, fused so that when a fire occurs the heat will melt the fuse and allow door to close, thus preventing the spread of fire.

A recent inspection of branches disclosed the fact that many fail to operate.

The Safety and fire prevention committee of the Buffalo Branch is endeavoring to make their plant as safe and clean as possible for the inspection by Safety engineers, hygiene experts and doctors from all parts of the country, who will be drawn to Buffalo by the annual Safety Congress in September or October.

It was found, on an inspection of the Omaha Branch by the committee there, that a few employees carried

matches while working on the trimming line. All were instructed to discontinue this practice because of the inflammable material with which they work. It is the neglect of little things that cause large fires.

During the month of May there were 35,709 employees working at the Rouge Plant. During the 25 working days of the month there were less serious accidents than for many months before.

An employee at the Indianapolis Branch suffered a fractured kneecap when he violated one of the standard rules, "Do not run!"

He is now getting around on crutches and finds the going rather slow.

Not only is the Des Moines Branch noted for getting in on the ground floor when it comes to Safety, but it is also anxious to proclaim its message from the housetops. Recently a Safety motion picture show was held on the roof of this Plant and approximately 700 employees attended. Safety talks were given and the meeting proved to be a huge success.

Similar meetings will be held in the future.

A splendid record has been established by the Pressed Steel Department, No. 7143, with 3,330 men on production and 355 tool makers. There were no lost-time accidents in this department during the week ending May 26, 1923. This is a very good record, indeed, when the hundreds of punch press operations in this department are taken into consideration.

Soaring Output at Ford Plants

Concluded from page 1

in the near future. This structure is 1,250 feet long by 250 feet wide.

Tractors to the number of 2,428 left the Fordson Plant for the same week.

An interesting feature of production occurred June 8, when Ford Motor No. 7,777,777 was turned out at the Ford Motor Company and shipped on that date to the Los Angeles Branch.

The following tables show in an interesting way the remarkable consistency with which production figures have continued to increase:

| May Weekly Car Record | |
|--------------------------|---------|
| Week ending May 1..... | 38,861 |
| Week ending May 8..... | 39,053 |
| Week ending May 15..... | 39,364 |
| Week ending May 22..... | 39,417 |
| Week ending May 29..... | 39,563 |
| Week ending June 5..... | 34,730* |
| Week ending June 12..... | 40,346 |

* 5-day week; Holiday Memorial Day.

| May Highest Daily Marks | |
|-------------------------|-------|
| Friday, May 4..... | 6,590 |
| Wednesday, May 9..... | 6,615 |
| Monday, May 21..... | 6,658 |
| Monday, May 28..... | 6,781 |
| Tuesday, June 12..... | 6,781 |
| Wednesday, June 13..... | 6,817 |

These figures also indicate that the time when the Company makes 7,000 cars daily is not far away.

There is no traffic in the streets of Seville, Spain, during Holy Week. All the inhabitants are imbued with a deep spirit of reverence which permits of no secular activity on these solemn days.

Ford Float Advocates Safety

In this age when the "world is on wheels," one of the most baffling problems facing city governments is the public Safety question. Promoting caution, eliminating carelessness, and reducing accidents has become an issue of the first magnitude.

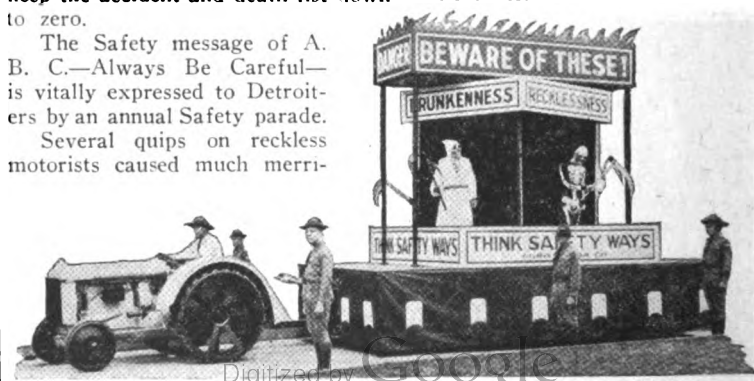
This is especially true in Detroit, America's fourth city, where the Safety workers must be ever vigilant to keep Death's toll at a minimum.

"Safety Week" is a period when the city administration and all the campaigners make a special effort to keep the accident and death list down to zero.

The Safety message of A. B. C.—Always Be Careful—is vitally expressed to Detroiters by an annual Safety parade.

Several quips on reckless motorists caused much merriment. Some of those which received a "hand" were: "The boob who used to blow out the gas now steps on it"; "Say it with brakes and save the flowers"; "Better a cold steak than a cold tombstone."

The Ford Motor Company's contribution to the affair is pictured herewith. Smoke issued forth from the top, and a realistic fire effect was produced. It warned against drunkenness, recklessness, hastiness, and carelessness. The bottom was painted to represent crutches and tombstones.



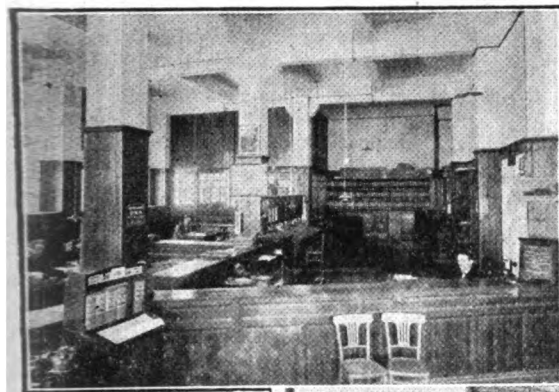
Morocco Has Up-to-Date Dealers Establishment

To the average person, Morocco calls up pictures of wild tribes of wandering nomads.

If that impression still holds good

Any Branch would be proud of a Dealer with such a well-equipped and well-arranged establishment.

Mr. Meslin, the director of Auto Hall says, "We have taken pains to allow as much air and light as possible to enter into our store to make it attractive to the customers."



Above—Offices of Auto Hall, Ford Dealers, Morocco. Below—A fully equipped, up-to-date shop to give the very best service.



most of the nomads evidently are "wandering" in Fords.

These pictures are of Auto Hall—the new quarters of the up-to-date Ford Dealers—Casablanca, Morocco.

The Diagnostic Clinic at Ford Hospital

Concluded from page 3

logical and mental section, the sections dealing with skin, bone and joints, heart and lungs, stomach and intestines, genito-urinary tracts, and that covering the question of the chemical processes of the body, and so on. In connection with these various opinions, all of the activities of the X-ray department and the laboratories are available, according to the needs of the individual doctor in the case. The facilities of these hospital physicians are located practically entirely in one building of the hospital, the centrally placed, six-story Unit A, and are co-ordinated as smoothly and efficiently as possible to serve the patient with the smallest expenditure of time and effort.

In every case, the physician who originally saw the individual patient is the recipient of these various opinions. Like an architect developing a finished structure out of the many materials required, or a pianist producing harmony from the many different keys, so this doctor, the patient's physician in the hospital, weaves his own observations and the opinions of others and the results of X-ray and laboratory tests into a useful whole, the diagnosis, evaluated not from any biased point of view but with every consideration of the patient's environment, his ways of living, his past, present and future.

When completed, it is fair to say these facts are the rightful possession of the patient. The interpretation, however, means so much more to him than the evidence. After verbal report and discussion, record of these facts and their interpretations will be prepared, if desired, and forwarded to the patient's family physician.

Advice in most instances is so logical and clear after a diagnosis of this sort as to make one feel that well-founded advice is easy to give if a well-considered diagnosis is at hand.

Another important point, not always appreciated, is the fact that the standard requirements of the modern man necessitate not only a thorough study but a logical basis for the diagnosis by the physician. This has such direct contrast to 25 years ago when no patient seemed interested in diagnosis. His only desire was to get treatment started. While this requirement is being satisfied in diagnostic study, the eyes of the patient are being opened to the fact that good common sense based upon honest observation is after all the backbone of medical engineering as it is of any other type. He arrives then at the point of advice well prepared to accept it and to apply it as nearly 100 per cent as possible, in order to make it not simply good advice but in the end, by its degree of application, successful treatment. This, of course, is designed to the advantage of the patient.

It might be well to emphasize also

that as changes have occurred in the attitude of patients toward medical problems in certain directions, in others traditional characteristics remain. Reference is made to the desire on the part of the patient for one personal physician in whom confidence can be placed and confidences made and relations established which enhance the value of both patient and doctor to each other. This is recognized at the Diagnostic Clinic as an essential feature, and opportunities are furnished to satisfy this point. Mention is made of it because in a large institutional organization, some people are apprehensive that their affairs will be handled in too much of a machine-like manner and not with enough personal contact. Their apprehension is unfounded.

The Diagnostic Clinic of the Henry Ford Hospital is so organized and located that it is available to both in-patients of the hospital and out-patients who return to their homes. It is in operation at all times and equipped to perform any of the innumerable and varied tasks which may be placed upon it.

The Alleheny Plate Glass Company, division of the Ford Motor Company, achieved the highest production in their history during May, when 582,216 square feet of glass was made. New equipment is nearly installed which will enable this Factory to boost their record still higher.

Mines See Changes

Concluded from page 1

house containing two 750-kilowatt turbines. Water for this project will be secured by throwing a dam across the left fork of Twin Branch and impounding an artificial lake of approximately 24,000,000 gallons of water. General conditions around the camp have been greatly improved, including the construction of new roads and the painting and cleaning up of the camp.

At the Stone Plant of the Fordson Coal Company, the last plant acquired by the Ford Motor Company, January 1, 1923, the power house is to be enlarged by the addition of one 2,000-kilowatt turbine. A new cooling pond is being installed to take care of this additional power unit.

The painting program is now in full sway and every house in the camp will receive a fresh coat of paint for the first time in six years. New screening equipment is being installed at all tipples that products leaving the plants may be of the usual high standard of all Ford products.

Two great highways in the Province of Quebec are to be brilliantly lighted. One road runs from Montreal to Quebec and the other from Montreal to the United States bound-

Spirited Music Marks Summer Programs

Health Talks Continue to Elicit Much Interest

Variety and Arrangement Commended by Listeners-in; Special Numbers Requested

Although WWI listeners-in have enjoyed the playing of Mr. D. M. Radovanovitch previously, the brilliant and delightful selections on the program of June 13, played on the new piano, were revelations. They were thoroughly appreciated by all lovers of good music.

Mrs. Roy J. Smith's choice and truly beautiful soprano solos and the appropriate and delightful tenor solos of Mr. William Waites were real contributions to the enjoyment of the program. Mrs. Smith was accompanied by Mrs. Jerre Parre, and Mr. Waites by John R. Rood at the piano.



Mrs. Roy J. Smith



Mrs. Alice MacCord

Blessed with both a singing and a reading voice of rare quality. Mrs. Alice MacCord entertained in a most enjoyable manner in her selections, which included both contralto solos and readings. She was accompanied by Mrs. Adarae Brattan at the piano.

The talk prepared by Dr. J. G. Mateer, of the Henry Ford Hospital, Detroit, on "The Psychology of Illness—Peptic Ulcer," contained much information of practical value to the average person, particularly any person who suffers with stomach trouble.

The program on the evening of June 20 was opened by that spirited selection from Rubenstein, "Polka Bohemi," played by Mr. George W. Cooper. Mr. Cooper also entertained WWI with his interpretation of those gems of music, Mendelssohn's "Spring Song,"



Mrs. Adarae Brattan

Ford Cars Reduce 2-Week Camel Trip Across Hot Desert Sands to 2 Days

Journey to Oasis of Siwa Discloses Many Interesting Scenes; Auto Transport Is Natives' Great Need

Isolated People Astounded at Speed and Ease of Machines

Major W. T. Blake writes an interesting account of his travels in a Ford car across the burning sands of the Sahara Desert from Alexandria to Siwa, the Oasis of the Oracle of Jupiter Ammon, a distance of nearly a thousand miles.

When he arrived in Alexandria from England, an organization known as the Desert Touring Club was about to start on a journey to Siwa. Hearing that he, too, was bound for Siwa, the club promptly invited him to join the party.

The expedition was fitted out with three Ford cars. Chassis had been obtained and equipped with bodies consisting of light shell platforms

desert was gorgeous with tropical flowers. When Mersa Matruh came into sight at 6 o'clock in the evening, every one of the nine persons in the party was suffering from sunburn. The most difficult stretch still lay before them.

The next day they headed southwest into the desert, now with a very competent guide. Climbing steadily

the exposed part of his legs between stockings and shorts was beginning to peel.

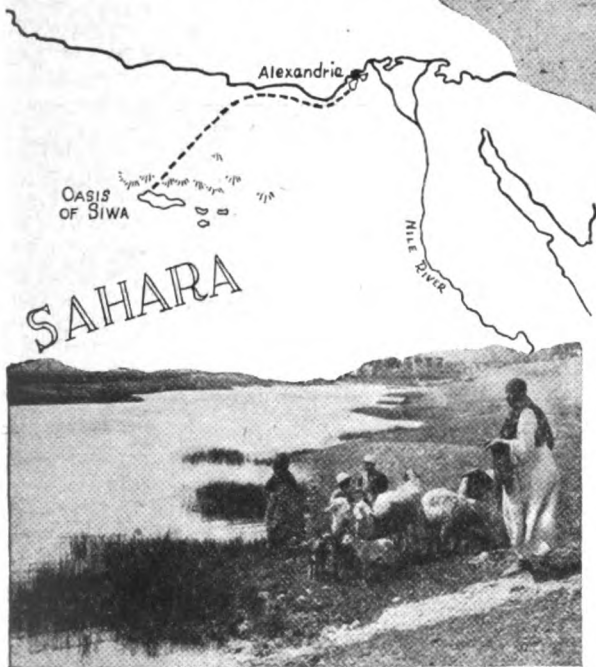
From here on the desert changed in character, the stones giving way to gravelly plains and sunken pans where excellent surface made it possible for the machines to travel at the rate of 50 miles an hour.

Regardless of the increased speed, Siwa seemed to be beyond reach that night, and about the time it had been agreed upon to camp in the desert, the guide became very much excited and, leaping to his feet, waved his



Above — Changing drivers on trip to prevent blistering hands in scorching heat.

Below — Nomadic herdsman with flock. Characteristic scene in oasis of Siwa.



with seats for two in front and extra large gas tanks. These were loaded with sufficient gasoline for a thousand-mile journey each, a tank of drinking water, food, rifles, ammunition, and camp equipment. Each car had to carry three persons, two on the front seat and one perched on the pile of baggage at the rear.

Departing from Alexandria at 6:30 a. m., the party's objective for the day was Mersa Matruh, some 200 miles west along the coast. During this stage of the journey they were at no time more than 10 miles from the Mediterranean Sea, and due to very recent warm winter rains, the

from the coastal region, which was covered with a coarse type of scrub, they came to an area of stony desert. In every direction as far as one could see was nothing but stones, some of which weighed tons. Here and there a pile of stones marked the grave of a Bedouin. Small stones in piles, sometimes only one small slab set upright in the earth, marked the trail, so the party was thankful for their guide. Seventy miles from the coast vegetation entirely ceased. The sun, now high in the sky, beat down pitilessly. The heat of the sun was so terrific that blisters formed on the backs of Major Blake's hands, and

rifle and exclaimed, "Siwa, Siwa!"

Far to the south could be seen the regular outline of a range of hills. Ordinarily it takes a camel from 8 to 10 days to make the trip from Mersa Matruh to Siwa and the guide could hardly believe they had made the distance in so short a time.

The approach to Siwa is weird and awe-inspiring. The centuries-old oasis is surrounded by hills, nearly all of which are honeycombed with ancient burial places, all of them in their original state.

Siwa lies in a mass of luxurious green palm and olive trees. At this time of the day, the blue waters of a lake glistened in the sunset and the sky itself was covered with every conceivable shade of red, purple and orange, making a very impressive sight. Siwa consists of a group of oases 30 miles in length and 6 miles wide, lying about 72 feet below sea level. The soil is extremely fertile and is watered by more than 200 wells, supposedly fed by an underground river, coming all the way from Abyssinia.

Siwa has a picturesque history, being the site a thousand years before Christ of the Oracle of Jupiter Ammon. Precious treasures and gifts were brought here, and there is reason to believe they may still be found in the ruins of the Oracle, according to Major Blake.

The Siwans retain many vestiges of the past, the primitive evident in nearly every aspect of their lives and work. The men often marry 20 to 30 times, divorce being no stigma; girls often become wives at nine years of age. The town is not cordial to visitors, and is even hostile to a neighboring oasis two miles away.

These facts are more than likely due to the condition and circumstances under which the natives must live. It is obvious that Siwa needs close contact with the rest of the world to break down the barbarism imposed through centuries of isolation. In view of the readiness with which the Touring Club penetrated the desert wastes, with the Ford machines, reducing a 15-day camel journey to two days, definite assurance is felt that the relief which this little town has needed since its earliest days is at last in sight.

Portland Plant Reopens as Assembly

Schedule of Fifty Cars Per Day Now Maintained

"Oregon-made" Fords are now being sent out from the Portland Assembly Plant at the rate of fifty cars a day. This number will be increased somewhat when the final plans have been completed.

During the war all of the machinery in the Portland Plant was removed to make munitions, but once again the building has been equipped for assembly work, this time with the most modern machinery.

The public has taken a great interest in the Plant, due very much to community pride.

"Portland citizens realize that few cities have such plants," states the manager, Mr. W. H. Goodwin, "and they are eager to know more about it."

Accordingly, "open house" has been declared in order, and guides are furnished at certain hours. More than 600 visitors availed themselves of this opportunity during the first week, and, although they were not distracted by any "selling talk" during the course of the inspection, nevertheless a number of very good prospects were obtained from simply viewing the methods of Ford construction and assembling.

At the formal opening, the governor, the mayor of Portland, and a number of other prominent officials were present, all of whom were very enthusiastic about the reopening and the opportunity afforded so many for profitable employment.

The Portland Assembly Plant supplies cars for the state of Oregon and the Columbia River border counties.

Adopt Fordson for Heavy Work

Lumber Company Prefers Tractors to Truck and Horses

20 Fords Also in Use; Figures Prove Economy and Show Superiority Over Complex Devices

The economic supremacy of the Fordson over the slower animal power is well understood by the West Side Lumber Company, of Tuolumne, California. They have purchased five Fordsons equipped with rubber tires. These they use to haul lumber from the sawmill to the yards where it is piled for seasoning. Prior to the purchase of the tractors the firm used horses and an electric truck for this purpose. Two Fordsons were put to work and they gave such satisfaction that the electric truck was discarded and three additional Fordsons were put into service in its place. The initial cost of the electric truck was about \$5,000. Repairs to the motors and the batteries cost approximately \$5,000 during the period of operation, which was 10 years. The cost of the tractors is, roughly speaking, one-third that of the electric truck cost, and the hauling by tractor is being done at a much lower cost. The tractors replace four teams of horses, as each tractor is figured to do the work of two teams.

This company cuts and ships 50,000,000 feet of lumber each year. A railroad extends back into the heavily timbered sections for 30 miles, with 40 miles of trackage, including the branches. Seven of the nine converted automobiles used on the tracks for the section crews for transportation are Fords and it is planned to make this department of the rolling equipment entirely Ford, as they have proved to be the best for work of this nature. Other Ford cars are used about the yards and the company has a total of 20 Ford units in operation at all times. The master mechanic states that the lumber is being handled cheaper than a rival concern can handle theirs with its overhead rail system and electric cranes which were recently installed to cut down handling costs.

No doubt there are countless others who are installing expensive machinery of a complicated nature to reduce costs where by spending half the amount of money for Ford products the same results could be obtained and better work effected.



Tractor Offers Famine Relief

Modern Farming Knowledge and Machinery Will Bring Crops to Unproductive Fertile Lands

Famine is a horror coming from earliest history that must be abolished, or else a terrible indictment is to be charged against modern civilization for the millions who annually suffer and starve from its ravages.

There is no necessity of famine occurring in such countries as Africa, India, and China, where the soil is just as fertile as it is anywhere else. Lack of knowledge and lack of machinery are the chief causes of famine. Both can be rectified by these countries which have led and been benefited by the world's progress.

Whenever and in whatever age

has been made in improving the implement or the method of handling it. The old type of plow, which is little more than a forked stick, is still in use in certain parts of the world.

For example, in the rich Nile Valley of Egypt the old primitive methods are still found. This is one of the great industrial and trade centers where the people are awakening to the need of using up-to-date machinery in their agricultural districts.

Fordson outfits are being put into use the world over, making a striking contrast to the old-time manner of



Ten tractors did the work of 1,000 oxen and 500 men.

man has gained his livelihood directly from the soil the first agricultural operation in order and importance is to break up the soil and invert the upper stratum. This operation destroys weeds to some extent and leaves the surface clean, unencumbered and in a condition favorable for weathering, which is an important feature in connection with agriculture. Ultimate results depend largely upon the thoroughness with which this first operation is performed.

The plow in primitive form antedates history. Plows shod with iron or bronze are mentioned in the Old Testament, but except in Western Europe and America little progress

plowing, in addition to the many other uses to which it is applicable.

The introduction of improved agricultural methods and machinery is only a question of time, but movement in this direction should start without delay. With the advent of such an agricultural missionary, more territory will be cultivated, greater crop yields produced, and famine's ravages will slip back into history with the dark ages.

A recent note from Armenia tells of tractor accomplishment:

"Ten American tractors plowed a thousand acres in 11 days. To accomplish the same work in the same time would have required 1,000 oxen and 500 men.

Ford World News Flashes

Bridgeport, Nebraska—By putting on a special sales campaign, the Bridgeport Motor Company, under T. C. McCamey, succeeded in selling the entire year's estimate in the months of March and April. During the campaign the Dealer spent approximately \$350 in advertising and about \$57 in telegrams. His pay roll for the month of March was \$1,700. Bridgeport has a population of about 1,500 people.

Los Angeles, California—Recently, Eddie Pullen, former noted racing driver, gave a talk before the student body of the Montebello, California, high school on the Lincoln car. Three prizes were offered by the Ford Dealer, Frank J. Dore, for the best essays turned in by the students. The first prize was won by a Japanese boy of 16 years.

Barre, Vermont—The Perry Auto Company has just closed a deal with the town council to purchase a Fordson tractor to draw the fire ladder wagon. This is only another instance where Fordson will serve public utilities. In several cases lately Fordsons have played an important part in connection with fire apparatus.

Atlanta, Georgia—A tour of the leading cities in the Atlanta territory has been made with a miniature automobile show called the "Salon Petite," consisting of several Lincoln cars and custom-built bodies. It would not be difficult to calculate the good that has been accomplished by the "Salon Petite" for the Atlanta Branch reports 150 unfilled orders for Lincoln cars and 75 per cent of these they claim are a direct result of the exhibit.

Tractor's Chug Means Lunch Is Here

Fordson Delivers Dinners Before They Can Get Cold

Nickel-plating, Electric Lights and "Trimmings" Give Tractor Distinctiveness

Dr. F. M. Pettinger, head of the sanatorium at Monrovia, California, which bears his name, has given the Fordson a new field of activity. The Fordson has been used for almost every imaginable job where power is needed but it has remained for this doctor to find a unique as well as a serviceable use.

The Fordson now has been given the position as assistant to the head waiter of the sanatorium dining room.

Since the sanatorium has been built there has been difficulty experienced in serving meals to patients living in the little bungalows that surround the main building. The streets of the little sanatorium city are steep and by the time the waiters carried their trays from the big kitchens, the dinners were generally cold. This caused an unlimited amount of complaint so that the chef in desperation hit upon a scheme to keep his dinners warm and the diners happy.

This was his method:

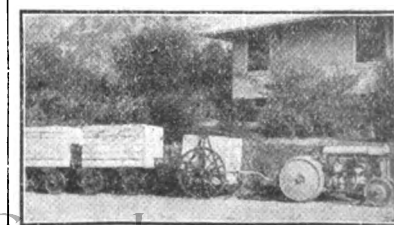
He had three big trailers made, with metal beds divided into a hundred or more compartments and to these trailers he hitched a shiny new Fordson equipped with rubber tires and electric lights and trimmed with nickel plating. In keeping with the surroundings, the tractor and its trailers were painted white.

The Fordson brings the trailers to the kitchen where the metal compartments are thoroughly heated by live steam before being loaded with dinners. Then the Fordson speeds away, up hill and down, pausing at every bungalow only long enough to deliver a steaming-hot tray.

So successful has the idea proved that Nelson and Mosher, Ford agents of Monrovia, have had scores of inquiries about the tractor.

And at the sanatorium the mellow tones of the dinner gong have been forgotten.

Mealtime is now heralded by the rhythmic chug-chug of the Fordson.



WWI Programs

Concluded from page 5

and three preludes from Chopin. Eugene Field's "The Night Wind," set to music by Roland Farney, was charming as sung by Miss LaNore Bruder. Miss Bruder also sang three other delightful selections which were much appreciated. She was accompanied by Miss Marian Winkler.



Miss LaNore Bruder

As popular numbers on this program, Mr. Ernest Fassio, whose concertina music is always enthusiastically welcomed, generously played a number of present-day favorites, among them, by special request, "Three o'Clock in the Morning."

Most of us are more or less familiar with experiments that are being carried out with insulin, the new-found treatment for diabetes mellitus. Dr. Irvine McQuarrie gave an enlightening and timely talk on this subject, which will be found of vital interest. It is Talk No. 66, and will be sent free of charge to those who send a request to Ford News, Dearborn, Michigan.



Miss Marian Winkler

Future Programs Station WWI

July 11, 1923.

Commencing at 8 p. m.

Tenor Solos—*Beloved, It Is Morn*, Aylward; *Love's Garden of Roses*, Wood: by Mr. Joseph Atkinson.
Bagpipe Music—*Seventy-ninth Farewell to Gibraltar*; *Midlothian Amateur*, pipe band march: by Highland Park Highlanders.
Soprano Solos—*Faded Love Letters*; *Take Me Back, Caroline*: by Miss Dale Bostwick, accompanied by Miss Louise Manin.
Travel Talk—*Alaska*: by Rev. R. Crissman.
Bagpipe Music—*Bonnie Dundee*; *Highland Laddies*: by Highland Park Highlanders.
Soprano Solo—*Through the Night*: by Miss Dale Bostwick, accompanied by Miss Louise Manin.
Piano Solo—Selected: by Miss Louise Manin.
Bagpipe Music—*McKenzie Highlanders*; *Strathspey Reel*: by Highland Park Highlanders.
Tenor Solos—*Duna*, McGill; *Abide with Me*, Liddle: by Mr. Joseph Atkinson.

July 18, 1923.

Commencing at 8 p. m.

Piano Solo—Selected: by Miss Ruth Burton.
Xylophone Solo—*The World Is Waiting for the Sunrise*, Ernest Seitz: by Mr. J. A. MacCallum, accompanied by his twelve-year-old daughter, Miss Marguerite MacCallum at the piano.
Vocal Solos—*On the Road to Mandalay*, Kipling and Oley Speaks; *Believe Me If All Those Endearing Young Charms*: by Mr. B. C. Place, accompanied by Mrs. B. C. Place at the piano.

Xylophone Solos—*Just a-Wearyin' for You*, Carrie Jacobs-Bond: by Mr. J. A. MacCallum, accompanied by Miss Marguerite MacCallum at the piano.

Health Talk—*The Psychology of Illness—Hospitalization*: by Dr. R. V. Durham, Department of Medicine, Henry Ford Hospital.

Xylophone Solo—*The Last Rose of Summer*: by Mr. J. A. MacCallum, playing with four mallets, unaccompanied.

Vocal Solo—*Consider and Hear Me, Oh, God*, Carl Pfueger: by Mr. B. C. Place, accompanied by Mrs. B. C. Place at the piano.

Reading—*A Frenchman's Impression of Macbeth*: by Miss Mabelle A. Knowlton.

Xylophone Solo—*Schon Rosmarin*, Fritz Kreisler: by Mr. J. A. MacCallum accompanied by Miss Marguerite MacCallum at the piano.

Piano Solo—Selected: by Miss Ruth Burton.

Reading—*When Paul Pints His Pistol at de Ephesians*: by Miss Mabelle A. Knowlton.

Xylophone Solo—*The Rosary*, Nevins: by Mr. J. A. MacCallum, playing with four mallets, unaccompanied.

Vocal Solo—*Flee as a Bird*, S. B. Dana: by Mr. B. C. Place, accompanied by Mrs. B. C. Place at the piano.

Original Sales Plan Gets Business

New Orleans Branch City Dealers Roll Up Enrollments

Credit is due the city dealers under the New Orleans Branch for introducing a new and original sales plan.

If, in New Orleans, you should happen some sultry morning, any time between seven and nine o'clock, to be standing by the curb patiently waiting for the street car which was to take you to work, you would more than likely be offered a ride to your destination. If you accepted you would get into a new Ford touring car which, according to the sign thereon, is being driven by a Ford salesman. Your curiosity might also be piqued by a poster on the windshield mentioning the Ford Weekly Purchase Plan.

The salesman does not long leave you in doubt as to the nature of the plan nor the many benefits derived from the ownership of a Ford. And long before you begin your day's work you are quite convinced that you need a Ford of your own, and without further delay you either place your order or enroll in the Weekly Purchase Plan.

The New Orleans Branch has fifty new touring cars out on the streets doing this work. Each car transports on an average of twelve passengers during the two-hour period. Approximately forty per cent of these passengers are good prospects for Ford products. The Universal Auto Company obtained recently three enrollments and an order for immediate delivery of a Coupé as the result of one morning's work.

Rapid Progress Made on Building

The excavating for the new Ford Motor Company Engineering Laboratory and Dearborn Publishing Company Building at Dearborn has been completed. The cement work on the end walls is completed and the two side walls are well under way. A portion of the floor at the north end has been poured. The work is progressing rapidly.

Electrification of D. T. & I.

Concluded from page 1

Power House. The pressure on the power transmission line will be approximately 150,000 volts, the trolley line carrying 22,000 volts.

The new Ford line, the Detroit & Ironton Railroad, to be operated in conjunction with the Detroit, Toledo & Ironton Railroad system, is now making rapid strides toward completion. The construction work is assuming huge proportions. This new road will be the first division to be operated with electric motive power. The line is to be double-tracked and will connect the Rouge Plant of the Ford Motor Company with the Detroit, Toledo & Ironton Railroad north of Flat Rock, Michigan. Although the Detroit & Ironton Railroad is to be but 13¼ miles long, it will effect enormous savings in switching charges between the Rouge Plant and the present Detroit, Toledo & Ironton Railroad terminus.

A large amount of work has been necessary on the division between the Rouge Plant and Oakwood Boulevard in making fill for approaches and on construction of a temporary trestle over the Rouge River. This trestle will be replaced with a reinforced concrete bridge.

One very expensive feature of railroad construction is eliminated in connection with the Detroit & Ironton Railroad by the use of refuse sand from the Rouge Foundry for grading purposes. The tracks are being laid with 100-pound rail and crosotied ties. Each tie will be protected with the plates which greatly adds to the life of the ties as well as forming a more secure track.

At present a force of two hundred and twenty-five men are engaged in rushing this work to completion and it is expected that the latest addition to the Ford Railroad interests will be operating in its entirety by October 1, 1923.

In connection with this line, which may eventually become part of the main line of the Detroit, Toledo & Ironton Railroad, extensive receiving and classification yards are being built immediately below the Detroit & Ironton Railroad at Flat Rock. In these yards all incoming trains will be broken up and arranged for dispatch, thus expediting the delivery of shipments to the consignee.

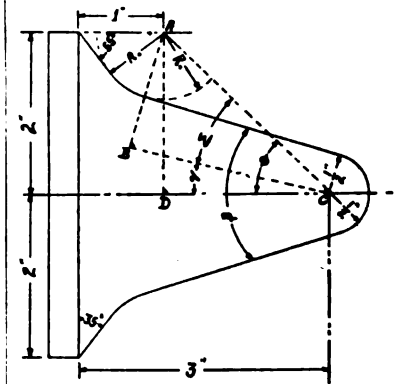
Problems

If there are explanations or comments regarding problems, write the Henry Ford Trade School, Ford Motor Company, Detroit, Michigan.

Solution to last issue's problem:

No. 62

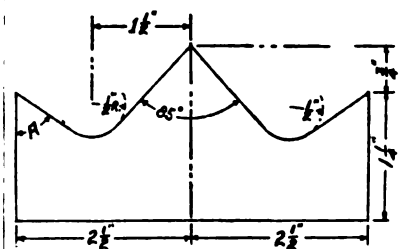
The following drawing has been purposely distorted to bring out details.



DETERMINE ANGLE B.
R = SINE 55° OR .81915 AD = 2"
AB = R + .5 = 1.3191 CD = 3 - 1 = 2"
ANGLE θ = 75°
AC = CD / SEC. 45° = 2.8284
SINE Z = AB / AC = .46639 OR 27°48'1"
ANGLE γ = θ - Z = 17°11'59"
ANGLE β = 2 (ANGLE γ) = 34°23'58"

Try This

No. 63



DETERMINE ANGLE A.

Airplane Used by Dealer to Advertise

Hollywood, California—The Hollywood Auto Sales Company, of 7518 Santa Monica boulevard, recently put on a splendid business-getting advertising stunt. The manager of the company, S. S. Nerney, chartered an airplane from which he distributed through the city several thousand especially printed aerograms. The aerogram read "All indications look like a great shortage of Ford cars. Tell your friends in L. A. and H. to place their order at once with you to protect themselves on delivery. Ford business better than ever before in history. No doubt you are still offering your special term deal to responsible parties. KEEP THIS QUIET."

Signed S. S. N."

Paris has 265,000 vehicles of all kinds.

Ford News

Volume II. F

Dearborn, Mich., July 22, 1923

No. 24

Company Aids Conservation of Forests

Ford Lumber Salvage Is 90,000,000 Feet Annually

Every Scrap Utilized in 100 Per Cent Program Extending to All Units of Organization

Salvaging of 90,000,000 feet of lumber annually is the Ford Motor Company's response to the call for national forestry conservation.

Aside from the wood used in manufacturing automobiles, the Company's requirements for packing and shipping run into enormous figures, and to provide lumber for this purpose every bit of scrap is utilized through the salvage department, even to the smallest possible pieces.

An average of 800 men are employed, working twenty-four hours a day on three eight-hour shifts, and the work includes the operation of the lumber yard, sawmills and the handling of all new and old lumber for shipping.

While it was not the intention of the Company to make this department profit-producing, yet by putting it on an efficient basis, it has progressed to the point where it is now self-sustaining.

First Half Year Figures Set Best Period in Ford History

Every factory unit in the Ford organization constantly strives for 100 per cent lumber salvage. Employees engaged in unpacking incoming shipments are instructed to remove carefully all boards with as little damage as possible, thus permitting the utmost utilization.

Lumber from more than 1,500 worn-out box cars from the Detroit, Toledo and Ironton Railroad has found its way to the salvage mill to be converted into boxes and crates and other pieces needed for shipping. A great pile of old logs which had been used as piling at a temporary bridge were shipped to the salvage department and sawed into usable boards.

Standardization of shipping packages has done much to bring greater efficiency in the lumber conservation program.

Three years ago the Company was using 600 different sized boxes and crates for shipping. Today ninety-five per cent of the same shipments

Concluded on page 8

Company's Plants Surpass All Records; Producing More Than Million Units in Six Months

A succession of broken records typifies the Ford Motor Company's production for the first six months of this year. All schedules have been passed. A total of 988,116 Ford cars and trucks was produced from January 1 to June 30, inclusive.

The remarkable impetus that has been given production is better realized when it is learned that the total output of Fords, Lincolns and Fordsons for the first half of this year closely approaches the total for all of last year.

From January to June, 1923, the combined Ford Plants turned out 1,050,185 units; while the number for the corresponding period of the previous year equalled 618,518 units. The following table, which includes

Throngs View 'Ford Age' Picture

Film Featured at Leading Theaters Throughout Country

Branches and Dealers Use Very Clever Advertising in Publicity Campaign

Enthusiastic reports from Branches and Dealers who have had a showing of the new Ford Educational film, "The Ford Age," in their cities, give gratifying evidence of the picture's reception by the public.

As soon as the production received its final touches, it was dispatched to the various Ford Branches throughout the country, receiving first showings in several localities, about the middle of June.

Comments reaching the Ford Motion Picture Laboratories at Detroit show that "The Ford Age" is proving a drawing card of the first magnitude, and that the film is being kept in constant use.

"The Ford Age" enjoyed a varied presentment to the public. In many cities it appeared at the finest local theaters as the program feature. Such instances include Cleveland, where the story of the Ford Motor Company was told from the screen of Keith's Palace theater; Atlanta, where the Rialto Theater received the film privileges; Cincinnati, at the Grand Opera House; Louisville, on the Majestic silver sheet; New Orleans, the Tudor Theater; Kansas City, the Main Street Theater, and at many other prominent show places. In the East, the reception was so enthusiastic that the New York Branch found it necessary to request

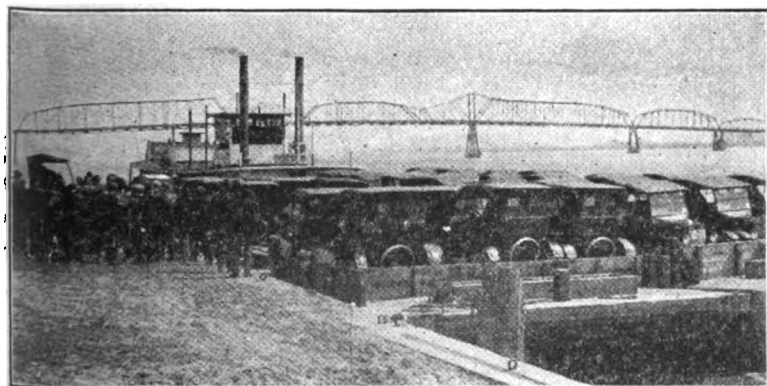
Concluded on page 8

Barge Fills Transport Need

Impassable roads which prevailed recently through Iowa along the Mississippi River did not in the least prevent the Horst & Strieter Company, Ford Dealers, at Davenport, from making prompt delivery to purchasers who were anxious to receive their machines.

The accompanying photo shows how it was done. After

receiving the cars from the Chicago Branch and assembling them, Horst & Strieter simply called a barge into service, and shipped the machines down the river to their Muscatine Branch, where most of the owners, or future owners, were waiting at the dock when the barge arrived. Many of the Ford machines were driven away by the customers.



Buyers eagerly waiting to drive away their Fords.

A new record for daily production was established June 30 by way of inaugurating the second half of this year. The new figure was set up when the domestic assembly plants eclipsed the previous high mark by 67, and turned out a total of 6,884 Ford cars and trucks. The domestic output for the week ending Tuesday, July 3, was 40,368 cars and trucks, 1,508 Fordson tractors and 171 Lincoln motor cars.

all Ford trucks, shows the amazing, yet consistent, climb of the production marks:

| | 1923 | 1922 |
|----------|---------|---------|
| January | 133,806 | 45,685 |
| February | 145,425 | 62,786 |
| March | 180,792 | 87,366 |
| April | 188,442 | 120,114 |
| May | 201,038 | 144,469 |
| June | 200,682 | 158,098 |

Production methods raised to the highest degree of efficiency, plus extensive changes and additions at Branch Assembly Plants throughout the United States, Canada and foreign countries, have made such records as these possible. The Cleveland, Denver and Portland branches, closed since 1918, were reopened on larger scales than ever before.

In this connection, the daily production records are very interesting, the first half ending with the mark of 7,000 cars per day in close sight.

Concluded on page 4

Ford News

ESTABLISHED 1920

Issued for the employees of the
various Ford Interests.

Vol. III, No. 18

July 15, 1923

PUBLISHED SEMI-MONTHLY

Motto

The conflict between the generations is as old as man and is the natural consequence of human progress. Those who are coming on behind us are not our children in the sense that we have created them and defined their limitations; they are rather a new race, different from us in their equipment and outlook—quite likely to be much better than we are. The best we can hope from them is respectful appreciation of what we tried to do, and the best we can hope for them is that upon our foundations they will build a stronger structure. Of all the follies the elder generation falls victim to this is the most foolish, namely, the constant criticism of the younger element who will not be and cannot be like ourselves because we and they are different tribes produced of different elements in the great spirit of Time.

—Henry Ford.

Efficiency and Prosperity

A recent trade bulletin discusses the relative efficiency of labor during slack times as compared to periods of prosperity. By means of a carefully worked out chart, covering a period of years, the statistician develops the fact that labor—and in this term is included the high-salaried executive as well as the rank and file worker—is most efficient during times of industrial depression. The reverse of this fact also holds when everything is booming. In other words, efficiency and prosperity do not travel hand in hand. While general prosperity is the result of efficient and hard work, nevertheless, as soon as prosperity arrives, efficiency is forgotten, which brings the gradual but inevitable return to dull times. Discussing the present prosperity the statistician points out that efficiency is already well on the downward path. The result is obvious.

There is a lesson in this illustration by which we can all profit. Every one, from the administrative offices down to the last man in the shop, wants to see good times. But, unless it is realized that only by putting forth the same amount of effort as was done during the times when work was slack and jobs scarce and taking the same degree of interest in the proper performance of the work,

nemesis in the shape of unemployment and unsettled conditions will result.

Continuous prosperity depends upon continuous application and hard work 52 weeks of the year.

Weed Out Your Mind

Knocking and Disloyalty are pals, as inseparable as the Hiss and the Snake, and as much to be despised.

It is a habit easily acquired, that of knocking and being disloyal, and soon becomes a malady, as loathful to the spirit as leprosy to the body. It eats from within, gnawing at your every nerve, uselessly burning up your strength and vitality in a perverted exercise of mind.

Nothing, perhaps, acts more as a boomerang. The employer or the organization to which one is disloyal does not suffer nearly so much as does the employee, whose mind is poisoned and whose strength is sapped by this pernicious practice. You remember Judas, as a result of his disloyalty, hanged himself, and is today held up as an example of all that is mean and despicable.

Disloyalty starts in a small way: it grows quickly, feeds on little things, and soon holds us slaves in a web of treachery and dishonor.

The unwritten law of the Ford organization, as of most organizations, is honor and loyalty. Stamp out the disloyal thought; shame the disloyal utterance, and start today to weed out of the mind any rank growth that may not become a loyal and honorable employee.

Unfinished Jobs

A man who had equipped a very fine workshop in the basement of his home was showing it to some friends. The tools were of the best make and of such a variety as to make possible the finest work. Yet one thing impressed the visitors. The shop was littered with unfinished jobs. With the facilities as well as the ability to produce a perfect piece of workmanship this man had no one completed thing to show for the time and labor spent in his shop.

Some people spend a large portion of their time starting things that they never finish. They waste their strength and effort jumping from one thing to another without ever accomplishing anything worth while. They have neither steady purpose nor constant energy. Their enthusiasm is spasmodic. Something new engages their attention; a new idea is born; it must be put into immediate action. But very soon the interest is gone or something else comes along—and another job is left unfinished.

At the end of the day how many tasks can you look back upon as actually completed—cleaned up and out of the way. Some persons simply allow themselves to become buried under unfinished jobs.

There is only one way to overcome a bad habit. Get hold of yourself and if you begin a thing finish it.

PITHY PARAGRAPHS

Nearly every success is due to starting right and sticking to it.

Success is one-tenth inspiration and nine-tenths perspiration.

Be tenacious of your rights, but also have a scrupulous regard for the rights of others.

A reputation for honesty and uprightness is a great advantage in life, and it is within the reach of all.

See that your character is right, and in the long run your reputation will be right.

In everything that we say or do, we are making a record that will help or hinder us in life.

What the world needs is men with principle underlying their expertness.

The just man will see to it that no one shall suffer loss or injury through his dealings.

Honor a good man that he may honor you, and a bad man or a fool that they may not dishonor you.

What by straight paths cannot be reached, by crooked ways can never be won.

How to Live to Be a Hundred, No Secret

Mother 93 Years of Age and Daughter 70 Visit Ford Highland Park Plant

"How to Live to Be a Hundred," and kindred topics, are of universal interest just now, judging from the amount that is written on this subject. But of more vital importance is to *live* at one hundred, or even ninety; that is, at that age (or at any age) to be alive to the teeming world about us.

A visitor's card from the Ford Motor Company at Highland Park gives an outstanding instance of such activity of mind and body. The card is that of Mrs. Sarah Merritt, of Ypsilanti, Michigan, ninety-three years of age, who made the trip through the Ford Factory with her daughter, who is more than seventy years old. In neat, legible handwriting on the reverse of the card is the following legend: "Made a regular trip through factory 1 hour, and was not tired—*anxious to see more of the plant.*" Incidentally, Mrs. Merritt also expressed a desire to see "The Dear-born Independent."

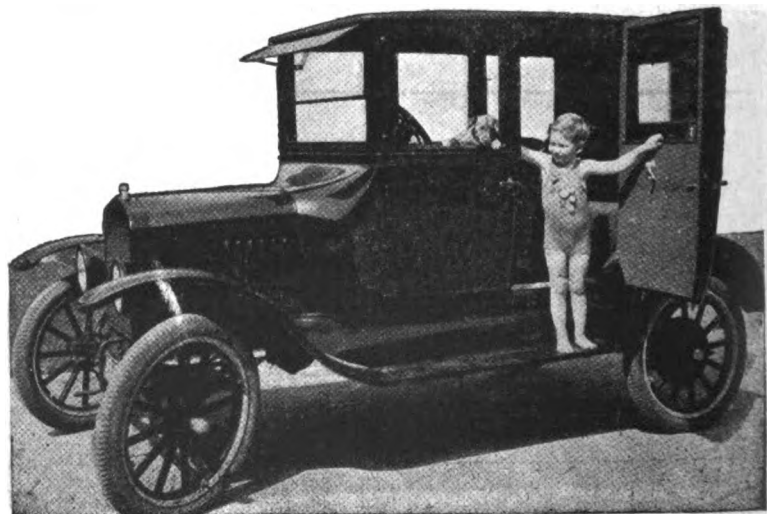
It is that alert, keen attitude which is the true spirit of perpetual youth. Let us, therefore, who are seeking the fountain of youth, begin now to cultivate that interested, unselfish outlook on life and the things about us.

Ford Favorite in Filmland

Ford cars are always increasing in popularity. The new four-door Sedan has caught the eye of the public with the result that there is a big demand. Film stars have taken a liking to the four-door Ford. The photo bears this statement out for here we have Micky M'Ban, child swimming champion, and fast becoming one of the filmdoms' leading child actors, with a new four-

door Sedan his parents bought him.

Micky is playing the leading child part in a production soon to be released by the Film Booking Company of America. When the picture was taken Micky was about to commence work on a scene but just had to forget about work for a while to have his picture taken with his two pets, "Admiral," his fox terrier, and his Ford.



Micky M'Ban, child swimming champion and his four-door Ford Sedan.

Professor Lives at Volcano Crater and Drives Ford Over Lava Wastes

Car Renders Invaluable Aid to Scientists Studying Kilauea and Mauna Loa, Noted for Spectacular Displays

Expedition Seeks a Use for Wasted Volcanic Energy

When this earth was created, Nature, it seems, was more concerned with things other than road making, as witness the accompanying illustration.

The pictures shown herewith were taken during one of Professor T. A. Jaggar's daily trips along one of the stretches which Nature forgot to pave with crushed stone and asphalt.

Professor Jaggar, of the Massachusetts Institute of Technology, is a noted volcano specialist, and most of his work is done around the craters of the smouldering mountains he studies.

As director of the Hawaii Volcano Observatory, he has devoted nearly all of his attention to the famous Mauna Loa and Kilauea craters, living right at the scene of his activities and experiments for the past twelve years.

Although hazardous, Professor Jaggar makes it his business to get

go through deep sand and "aa," which is the Hawaiian for clinkery lava.

After having seen about half a dozen years of the most strenuous service imaginable, the car is still "going strong."

Mauna Loa is the largest, although not the highest, volcano in the world, being 13,760 feet above sea level; Kilauea crater is an immense

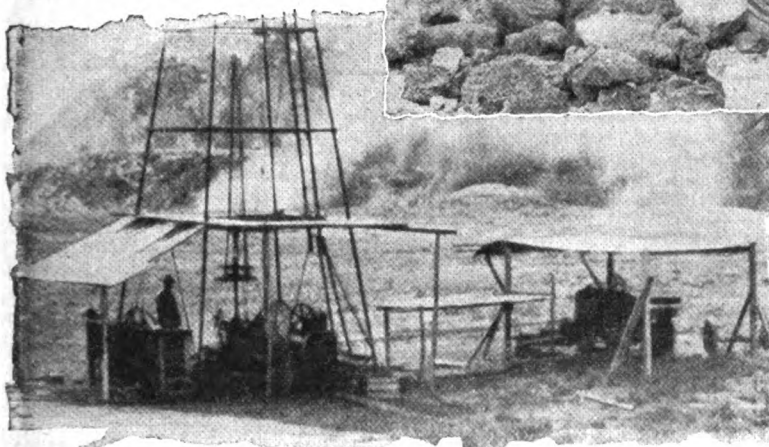
comfortable for the feet of his dog. The machine is often "cruised" over freshly flowed lava that is not yet cool in order to make scientific investigations.

Professor Jaggar has set up a drilling rig here for the purpose of getting down into the hot lava bed directly beneath the surface to determine the subterranean temperatures and to take samples of gases.

The Ford car has been of indispensable assistance in transporting the equipment to and across the terribly rough crater floor; also in carrying the large quantity of water



Above—Professor Jaggar making his way across the boulders in the extinct crater of Kilauea volcano. Left—Rig used by the scientist for drilling into the porous lava to secure scientific data. Note the volcanic steam in both photographs.



needed when drilling into the hot lava. Heavy photographic equipment is easily taken care of by the car, and specimens are often gathered which have to be taken back to the observatory for study. Because of these and numerous other services rendered by the car, no limit can be placed upon its value to the expedition.

At times, the lava in the crater rises rapidly and overflows, spreading destruction on its path. Occurrences like this have been the occasion for several intensive and hazardous expeditions by Professor Jaggar and his party.

Professor Jaggar has discovered many facts of scientific importance, and is working on plans for utilizing the heat of the volcano for commercial purposes. He believes that ways can be found to generate a large amount of electricity. First, he hopes that a near-by hotel can be supplied with all the current needed; and eventually, if practical ways are found for harnessing the energy, the entire island will get its power from the volcano.

as close as possible to the scenes of eruption and volcanic action in order to obtain first-hand photographs, lava samples, temperature readings, and other valuable scientific data.

In this field of work one needs a "business car" just as much as in any other calling, and so the scientist got himself a car that would be not only easy of operation but would stand the terrible strain of volcano climbing as well.

The professor bought a Ford and made a few alterations to suit his particular needs, with the result that the machine became more efficient than beautiful. If you will refer to the picture, you will note that the fenders and doors are stripped, and that dual wheels are installed on the rear axle, which enable the car to travel over boulders 10 and 12 inches high with little difficulty, and also to

cavity three miles long by two miles wide on the east slope of Mauna Loa.

These immense caldrons are reached by means of a very steep, rough trail, which more than proves the marvelous durability of the only car that has ascended it.

At the present time nothing but a pack trail leads to the summit of Mauna Loa, and so the Ford cannot be driven to the top, but it has plenty to do in the vicinity of Kilauea and also on the vast flanks of Mauna Loa, where various eruptions have taken place.

About a mile distant from Kilauea is a smaller, extinct crater known as "Little Kilauea." While it is no longer a sea of molten lava, like its near-by active brothers, nevertheless its surface is hot enough in places to be detrimental to the rubber tires on Professor Jaggar's Ford, and un-

Exacting Tests Prove Springs' Strength

90,000 Vibrations at 1,850 Pounds' Pressure Is Trial

When one reflects that the spring of an automobile get the jolt of every one of the countless bumps the machine encounters, naturally one wonders how the springs withstand such a terrible strain.

Extraordinary tests prove Ford springs before they are ever released for assembly.

Before the steel is accepted from the mills samples of each heat are made into trial springs, and tested in a special apparatus subjecting them to 90,000 continuous vibrations of 1,850 pounds to each stroke. Rarely does a spring receive such an enormous pressure in actual use. It is interesting to note that "Ford" springs made by outside concerns break before 20,000 of these vibrations.

After the metal is found to be of standard quality, it is heated in furnaces at 1,500° Fahrenheit. In shaping the leaves, the forms used keep them so exact that they are interchangeable with corresponding leaves on other springs. The leaves are formed and hardened in oil in one operation. Next they are tempered in nitrate at 875° Fahrenheit, after which they are graphitized and used.

In 1915, the department employed three or four men to make 50 springs a day; at present, 600 men are converting four carloads of steel into 18,000 springs daily. To date, a total of 13,427,000 springs have been made.

Lessen Forest Fire Hazard

New System Developed on Ford Property

The following remarks are from a recent editorial in the *Ottawa Journal*:

In Northern Michigan a timber tract of 400,000 acres has been acquired by the Ford interests. While millions of feet of wood are being cut annually, the purpose is to grow timber as well. Every practice of good forestry is being exercised.

Practical lumbermen have maintained that hardwood brush cannot be burned, but in the Ford Motor Company's forest this is being accomplished very satisfactorily. Logs are easier to "skid" after the undesirable brush is burned, and a fire protection from inflammable material results that should make these woods quite safe in about two years.

In conducting operations to reduce fire hazard and assure timber regrowth, the Ford interests will perform a valuable public service.

Dealers Present Weekly Purchase Plan to Public Through Unique Advertising

Striking Displays, Clever Publicity Ideas Result in Large Number of Enrollments

Progressive Ford Dealers from coast to coast are getting "sure-fire" results with the Weekly Purchase Plan by use of a "sure-fire" method—advertising. It is gratifying to note this fact; more so because this is a period in our business history when advertising, by influencing and selling the public on an idea, measures to a large extent the success of present-day business ventures.

The Dealers are not only making good use of the advertising matter supplied by the Home Office, but in many instances are creating special additional material of their own.

Ford automobiles, "dressed up" somewhat after the manner of a circus "float," are proving highly effective and well worth the small expense incurred. Attractively lettered signs on cloth or on the car itself carry the Dealer's message. Slogans such as "Start Today and Before You Realize It You Will Have a Car of Your Own," "The World's Greatest Value in Motor Cars at the World's Lowest Terms," "You Can Drive Your Own Car Now," are characteristic of the mode of appeal. Appear-

tions enhanced the beauty of the automobile.

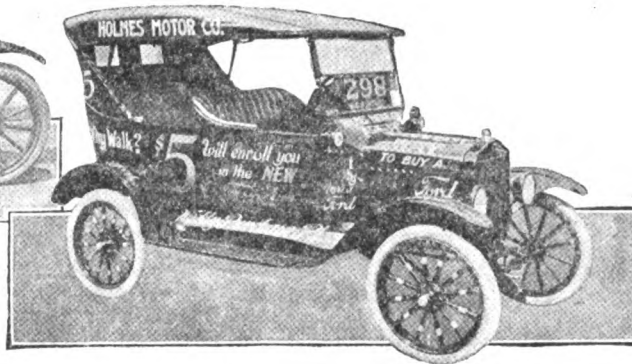
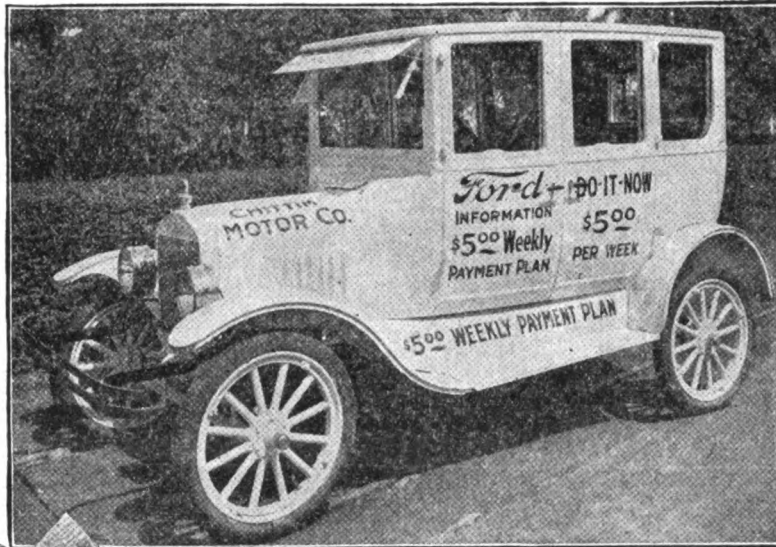
Numerous examples of this type have come to notice, a number of which are reproduced on this page.

Another Dealer, Roy E. Litchfield, of Hingham, Massachusetts, has erected large, nicely painted signs

together. The Weekly Purchase Plan was featured by prominent signs. The Dealer states that the first day his salesmen had the car on the streets, 17 prospects were obtained for immediate or future business.

As an added stimulant, a Ford car was given away.

The McGraw Motor Company, Dealer at Wheeling, West Virginia, utilized eight Ford chassis carrying large signs to bring the Purchase Plan before the public eye. "Ask the



The attractively painted car shown in the upper right view is by the Chittim Motor Co., Houston, Texas, and illustrates an excellent method of advertising dealers are using. Above appears the unique machine made by a Saugerties, N. Y., Dealer. The Ford car to the right is by the Holmes Motor Co., Milwaukee Dealers.

ing right on the automobile itself, this form of publicity was rendered doubly forceful.

The Service Motor Company, Dealer at Fond du Lac, Wisconsin, employed a Ford painted after this style, and mounted on a trailer pulled by a Fordson tractor. Music from electric chimes insured the attention of every pedestrian in the proximity of the exhibit. A large proportion of the populace at Galesburg, Illinois, became acquainted with the Weekly Purchase Plan as a result of a float entered in the automobile show parade by the Mackemer Motor Company. A Fordson painted in gold drew a platform upon which was mounted a shining new Ford car and descriptive banners. Floral decora-

tions enhanced the beauty of the automobile. The Miami *News-Metropolis*, by means of a clever co-operative advertising stunt, between local Ford Dealers and merchants during "Ford Week," not only gained four pages of advertising for itself, but secured 2,200 Ford prospects, many enrollments for the Purchase Plan, and stimulated business for ten local merchants.

Similar to the very novel "automobile," shown in the middle picture in the group of photographs appearing on this page, is the contraption rigged up by the Duncan-Smith Company, Dealers at Waco, Texas. It was made by hitching two Ford cars

together. The Weekly Purchase Plan was featured by prominent signs. The Dealer states that the first day his salesmen had the car on the streets, 17 prospects were obtained for immediate or future business.

When the "circus came to town," the Fuller Motor Company, Cumberland, Maryland, saw possibilities for advantageous publicity, and obtained permission to decorate the elephants with banners advertising Ford cars. Later the Wall Motor Company, at Charleroi, Pennsylvania, followed out a similar idea. A talk at the ring-side was given before opening the show.

Many other Dealers, and a large number of banks, are featuring the Purchase Plan by means of window displays, which will be given attention soon in a separate article.

First Half Year Breaks Records

Concluded from page 1

Beginning with the greatest number produced on a single day in 1922, the figures follow:

| | |
|----------------------|-------|
| August 29, 1922..... | 5,699 |
| March 19, 1923..... | 5,759 |
| March 28, 1923..... | 6,126 |
| April 3, 1923..... | 6,453 |
| May 4, 1923..... | 6,590 |
| May 21, 1923..... | 6,658 |
| May 28, 1923..... | 6,781 |
| June 13, 1923..... | 6,817 |
| June 30, 1923..... | 6,884 |

Increased popularity has distinguished the progress of the Lincoln motor car. This fact especially has been observed in the foreign market. Exhibitions of the eight standard models, motor tests and added refinements in the car have all had great weight in enhancing the Lincoln appeal in the quality market.

February 4 was the first anniversary of the acquisition of the Lincoln Motor Company by the Ford interests. For January, 1922, the last month under the former control, Lincoln shipments numbered 39 cars; the following month shipments jumped to 136. From January to June of this year, the output of the Lincoln Division, averaging 135 a week, was as follows:

| | |
|----------------|-----|
| January | 631 |
| February | 358 |
| March | 338 |
| April | 625 |
| May | 778 |
| June | 782 |

This gives a total of 3,512, which compares very favorably with last year's entire output, which numbered 5,242.

Figures on the manufacture of Fordson tractors for the half year just ended offer a striking contrast to former records. Through June of this year, the River Rouge Plant made 58,557 tractors; while the total for 1922 as a whole amounted to 68,985, and the year before that, 36,753. More than 300,000 Fordson tractors are now employed in agricultural and commercial pursuits. A noteworthy feature in this connection is the increased use of the Fordson in many municipalities for service in the street and public works departments. There is one Fordson to every thirty-nine farms in the country, and fifty per cent of all the tractors on the western coast are products of the River Rouge Plant.

Every nerve is being strained by all units of the Ford organization to make an impression on the list of waiting orders for Ford products. The Ford expansion program for the ensuing year, under which many millions of dollars will be expended for new buildings, new machinery, new equipment and additional sources of raw materials, gives some insight into the future and an indication of the business development to come.

Radio Fans Delight in Offerings From WWI

Artists of Exceptional Skill Combined in Program

Members of Henry Ford Hospital Staff Give Instructive Talks; Sent Free Upon Request

The Health Talk by Dr. W. T. Garretson, of the Surgical Department of the Henry Ford Hospital, entitled "When Should Tonsils Be Removed?" divided this evening's musical program into two distinct parts. A copy of this talk, which is No. 67, may be procured by request-



Saxophone Quintet from Duane Sawyer Saxophone Concert Band.

ing it by number from Ford News, Dearborn, Michigan.

The dignified and graceful "Minuet from L'Arlesienne," by Bizet, played as a duet by Mrs. L. T. Clark and Mr. Shields Dierkes, launched the program. It was followed by a score of musical treats, such as "Come Down Laughing Streamlet," "Old Black Joe," and other delightful songs by the Crosby Chapel Quartet, which were interspersed through this part of the program.



Crosby Chapel Quartet.

The waltz song from "Romeo and Juliet," by Guonod, was charming as sung by Miss Celia Dierkes, whose soprano voice of remarkable timbre was well adapted to interpret this song.

Miss Kathryn Slagle's contralto solo, "If You Would Love Me," by MacDermid, was most enjoyable. Miss Slagle has a fine, clear voice, and sings with genuine feeling.

After hearing Margaret Terry's spirited soprano solo, "In Italy," the listeners must have longed to be in that idyllic spot. Miss Terry's interpretation had all the life and fire commonly associated with this romantic country.

The mood and beauty of Schubert's "The Wanderer" were remarkably conveyed in Miss Florence Mitton's contralto solo, her rich, deep voice being singularly happy in this selection.

Following the health talk, the quintet of the Duane Sawyer Saxophone Concert Band delighted devotees of popular music by a torrent of selections unsurpassed for dancing. Among the selections were that weird "Ghost Dance," by Salisbury, and the saxophone interpretation of "When My Shoes Wear Out from Walking, I'll Be on My Feet Again."

There seems to be a wide call for

Concluded on page 8

Fordson Heads Pictorial Section



Above is a reproduction of the cover page of the January issue of the Los Angeles Sunday Times. The picture is entitled "The End of the Furrow" and shows a Fordson doing its characteristic good job of plowing.

"Going Over the Top" With Aid of Ford Equipment

Rancho Santa Fe, a 9,000-acre estate near Del Mar, California, which the Santa Fe Land Improvement Company, a subsidiary of the Santa Fe Railroad System, is developing as a model community for orchardists, is finding Ford cars, Ford trucks and Fordson tractors indispensable. The fact that this project, which one of the largest business organizations in the country is determined to make the last word in scientific efficiency, is placing such heavy reliance on Ford cars, trucks and Fordson tractors is in itself a high tribute to their adaptability for many and varied uses.

The company is working on the theory that a community planned from the beginning and carried through in accordance with those plans will be as superior to a community which "just grew" as a building erected according to the specifications of skilled architects would be superior to one constructed by several hundred builders, some skilled and some unskilled, working independently.

The place chosen for this unique demonstration is one of great scenic beauty. The rancho, once a princely Spanish land grant, lies between the mountains and the sea in the frostless area of Southern California. Six miles east of it is Lake Hedges, a nine-mile stretch of clear mountain water locked in the heart of a range of friendly hills over which the hot winds of areas farther from the coast cannot pass. Six miles west the Pacific Ocean splashes on the long, safe beach at beautiful Del Mar. It is cool yet never cold, frostless yet never hot, far enough from the sea to be ideal for the culture of citrus fruits, avacados and deciduous fruits yet near enough to permit an orchardist to drive from his home to the beach in fifteen minutes.

The first steps were the building of roads and of pipe lines for irrigation and domestic water, and then the use of Fords began. Every road was laid out with a view to scenic beauty, so that the fifty-one miles of the

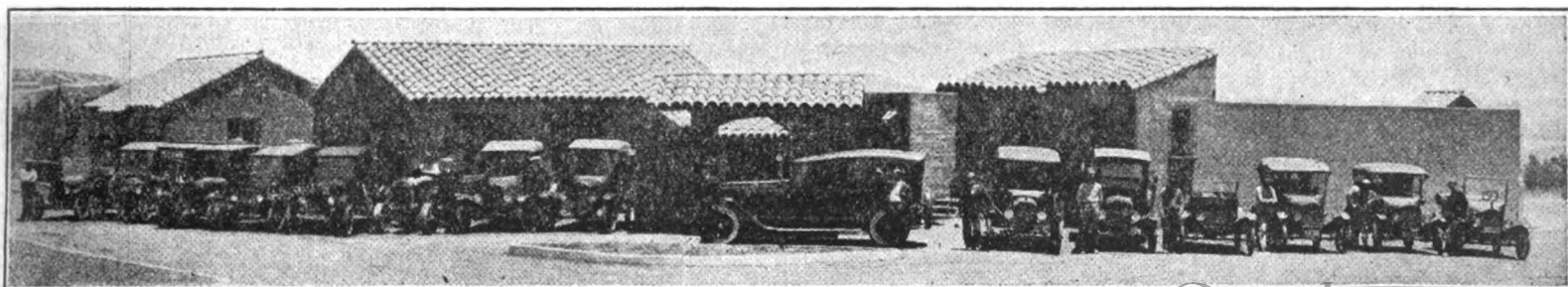
completed system virtually landscaped the area. From every rise and every valley the topography and the surrounding scenery was studied, and it was in Fords that the engineers sped from point to point to study each effect. Similarly, the engineers for the covered-conduit irrigation system went all over the area in Fords to work out their problems of efficient and economical distribution. Gentle as are the slopes and graceful as are the ridges of the rancho, they had to break their trails. And it took cars with real go-getter engines to do it.

Rancho Santa Fe is often referred to as extremely "exclusive" and "aristocratic" and Dealers in higher priced cars imagined they would get all its business, but after careful study of its many needs it was to the Powell Motor Company, of San Diego, handling exclusively Fords, Fordsons and Lincolns, that Manager Sinnard turned for the bulk of his equipment. Fordson tractors and

then Ford trucks followed the first purchases of Ford cars, and now are the mainstay of the rancho fleet.

As soon as the roads were laid out, Fordsons were put to work. With extension rims they made excellent rollers, and towed other rollers, giving almost the effect of double rolling. With "sheep-feet" on the extension rims they made good road tampers. With a blader, a drag and a roller all hitched behind it at the same time, a Fordson could put a regular furniture finish on a long stretch of road in an incredibly short time. Now that the roads are complete, two Fordsons with bladers, drags and rollers attached keep them in perfect condition, with some time to spare for other jobs, which isn't so bad for fifty-one miles of roads.

While it cannot be exactly said that it is "the community that Fords built," it will be another great triumph in which, like the late World War, Fords and Fordsons played a mighty important part.

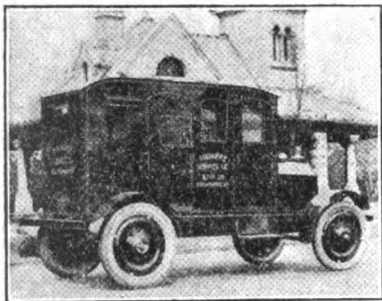


A barrage of Fords have proved indispensable in the construction work at the Rancho Santa Fe, near Del Mar, California.

Echoes from the Ford World; Events of Unique Interest

Armored Car Protects Money; Dealers Write Huge Sign on Hillside

St. Louis, Missouri—To transport money through the streets of St. Louis and vicinity, the Guarantee Service Corporation is using an armored car, which was made by add-



ing a steel body to an ordinary Ford chassis. The carrier is not only safe, but has a very attractive appearance.

Jacksonville, Florida—A model of the *Lusitania* mounted on a Ford touring car frame and drawn by a Fordson tractor won first prize at the annual Spring Follies here. The float was entered by the Southern Enterprises Inc., consisting of the Duval-Palace, the Imperial-Arcade and the Rialto theaters.

Purcellville, Virginia—Another ingenious display appeared in the window of the Purcellville Motor Company. It comprised a miniature airplane built entirely of Ford parts. A realistic cannon, pointing in the direction of the plane, was made of other Ford parts. It is doubtful if the gun could have brought down the flier, for he was held in mid-air by means of invisible wires.

San Francisco, California—Since the first of the year the Ford Branch has had a representative conduct motion picture shows in the showrooms of the various Dealers in the district. Ford educational and industrial films were shown and good crowds attended each performance. As each visitor enters the showroom he is given a card on which he writes his name and address, make of car he owns, whether or not he is interested in the purchase of a new car, name and address of any prospects he knows of and lastly how many strokes of a hand pump are necessary to blow up an inner tube. Prizes are given for the latter answer and this always holds the crowd to the end of the show. These have proved very popular throughout the district and in many cases Dealers have obtained such good results that they are asking for more concerts.

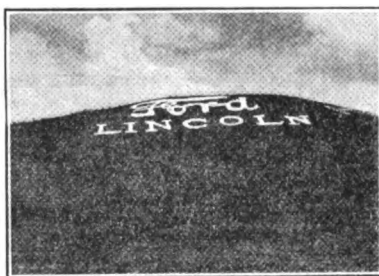
Houston, Texas—The J. B. Townsend Construction Company is using a Fordson for hoisting operations in building the new million dollar mu-

nicipal compress. So far it has proved very successful in hoisting mortar, concrete, lumber and steel.

London, Ontario—The new building of the Middlesex Motors Limited. Dealers in Ford products, has just recently been completed and is probably one of the most up-to-date Ford homes in Ontario. The building was erected at a cost of more than \$50,000. Its floor space is approximately 20,000 feet. The front elevation of the building is divided into two arched glass sections, and entrance is effected through an arcade passage. A complete parts department will be included by the Dealers. Joseph Dixon Isaacs, formerly of the Windsor Plant, is president and general manager of Middlesex Motors.

Sayajiganj, Baroda, India—The Fordson tractor adapted as a locomotive, running between Morvi City and its port on the Rann of Kutch, Navlakhi Bunder, a distance of about 32 miles, is proving satisfactory. The trip is made in a day and this is very good considering the engineer takes plenty of time at every station and stops just about whenever he pleases.

Bartlesville, Oklahoma—An enormous sign, with rock letters 25 square feet in area, has been laid out on the side of a mountain near here to advertise the fact that the G-V Motor



Company are Ford and Lincoln Dealers. The sign is an excellent publicity medium, as it can be seen for miles around.

Trinidad, Colorado—The Association Motor Company reports that during the month of March, 64 cars and trucks were delivered by them and 13 by one of their branches. This is a record and the surprising thing is that every one remained in the county.

Dodge City, Kansas—At the last exhibit of the Ford County Agricultural Society a replica of a Ford car made from grains grown in the county was the chief feature. The model was shown at several agricultural exhibits, receiving much praise on each occasion.

Transportation Costs Cut by Use of Ford Fleets

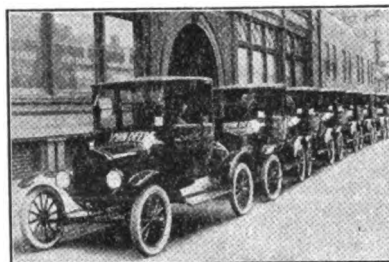
Enterprising Companies Keep Pace With Times

Salesmen Make Better Time; Eliminate Costly Delays and Visit More Prospects

To keep step with the quickening pace of the times and to meet the problem of increasing competition, firms the country over are seeking methods whereby they can secure high-powered efficiency.

Two noteworthy examples are at hand of progressive concerns who have an eye for the future, and are acting accordingly.

One of these is the John Deere Plow Company, of Kansas City, Missouri. This company is keeping up-to-date in its sales methods by providing new model Ford Coupés for salesmen who cover extensive territory in Missouri and Kansas. No



longer will these representatives experience costly, dreary waits through dependence on inconvenient interurban and transportation schedules; instead, more prospects can be visited and consequently more business done. Moreover, the machines bearing attractively lettered signs do excellent advertising service.

Another good example displaying the same type of progressiveness is seen in the recent sale of ten Ford Sedans to the United Transit Company, of Helena, Arkansas. This company, which is headed by Mr. George Lum, who came to this country from China, operates a bus service between the towns of Helena and Ferguson, a distance of sixty-one miles.

Mr. Lum originally started in 1921 with one heavy, high-priced car. Others noted his success and also started running similar buses over the same route. Mr. Lum, endeavoring to protect his own interests, purchased another large bus. Then the



Ten Ford Sedans in daily service over 61-mile bus route.

Ford Dealer at Helena, the Mott Motor Company, encouraged Mr. Lum to replace his equipment with the more comfortable Ford Sedans, which could also be operated as taxis in Helena. At first it was rather difficult to convince Mr. Lum where the additional expense of drivers, and so on, would be more than offset by the increased business he was sure to get. However, he did buy a Ford truck with bus body.

This was the entering wedge for the Dealer. All this time the competition was growing keener and keener, and there was considerable rate cutting. It was not long before Mr. Lum was sold on the idea that he must change his equipment; and now, not only the United Transit Company, but their patrons, as well, are highly pleased with the new fleet of ten specially colored Ford Sedans which are low in upkeep and operating expense, and yet afford all the comfort and attractiveness that can be found in the higher-priced cars ordinarily found in taxi service.

Speed Contest Brings Many Inquiries

Lincoln Car Achieves Renown as Result of Victory

Police Departments Are Interested in Results of Tests to Select Flyers

Following the speed contest recently conducted by the Detroit Police Department for the purpose of selecting flyers, in which the Lincoln car was victorious, a stream of inquiries has been received by both the Ford Motor Company and the Police Headquarters. In one mail, the latter office received communications from New York City, Los Angeles, Dallas, and Newark, requesting information pertaining to the rules of the trials, test procedure, and similar details.

Judging from the number of these inquiries, it appears that the police in all of the large municipalities realize that they will have to meet the crime problem with more efficient and dependable flyers if they are going to cope successfully with the situation.

Among other things, one of the features which appealed very strongly to the Police Department is the fact that all Lincolns are equipped with hydraulic shock absorbers on all four springs, enabling the car to be driven at a high rate of speed over rough roads without throwing the car out of control or dislodging the passengers from their seats.

Caravan Shows Ford Service Helps

Branch Seeks Perfected Work in Dealers' Shops

Use Ton Trucks in Novel School to Give Ford Mechanics Instruction

In the past, we have always thought of caravans as a long file of Arabs and camels wending its way slowly over desert wastes. But herewith we portray a new kind of "caravan"—one which shows not a vestige of the Orient, but one which travels over paved highways at a speed averaging some thirty miles an hour.

It is known as the Ford Service Caravan, operated under auspices of the Atlanta Branch of the Ford Motor Company. The caravan itself consists of seven one-ton trucks, making a complete tour of this branch's territory. When a destination is reached and a stop made, six of the trucks are placed side by side, affording a floor space of about 12x50 feet, and thereon is mounted a Ford Dealer's shop, comprising all the best and latest type equipment that is necessary to render proper service work. The machinery is driven by a Fordson motor, which makes it possible to put all pieces of machinery in operation at a minute's notice. One piece of machinery is for making motor bearings, a feat which can be accomplished in twelve minutes at a very small cost; another is for making repairs on batteries; there is an alignment tool for testing the true-ness of the crank shaft; a rear axle stand for straightening and working on the rear axle, which eliminates the second man; and a combination and heavy arbor press for pressing gears and straightening front axles. This has a thirty-ton pressure. There is an interesting electric light plant which furnishes complete illumination.

An advance man is sent ahead of the caravan, and he attends to preliminary arrangements, especially of a publicity nature.

Two-day stops are made in the principal cities of the region, and the Ford Dealers and their men assemble from all the surrounding points to attend the session. The first day of the clinic is devoted to educating the men in the proper handling of the equipment they already have in their

shops and to demonstrating other machinery that would expedite their work.

The entire affair is then moved to the heart of the city and a public demonstration is given that night. The object is to impress upon the people the importance of having their Ford cars repaired by authorized Dealers, and to emphasize their insistence upon genuine Ford parts.

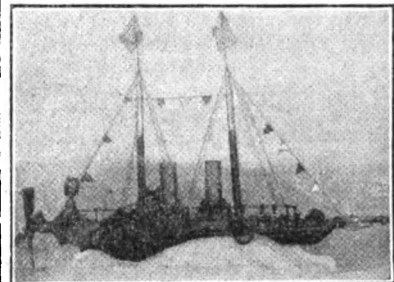
The morning of the second day the men are instructed as to the proper way of assembling a knocked-down car and preparing it for delivery. A luncheon follows this at a leading hotel, where the service feature of the business is covered from one end to the other. Mr. Mitchell, Atlanta Branch Manager, and other speakers, touch upon factors having an important bearing to the organization.

Many of these meetings have already been held, at such points as Athens, Augusta, Savannah, and Birmingham.

Undoubtedly the Service Caravan will have a far-reaching effect, and it will be difficult to estimate the amount of good it will do.

A Novel Display by Kansas Dealer

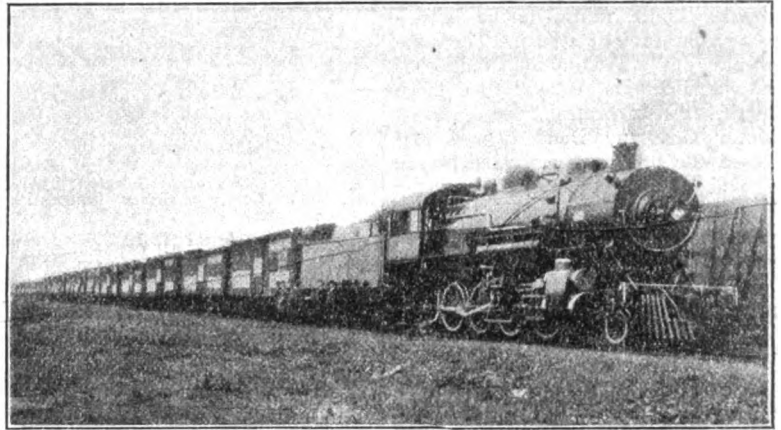
Larned, Kansas—By means of a novel window display, residents of this town saw how "the universal car" could be made even more universal by converting it into a ship. With a crank-case for a hull, two rear axles as masts, four bearing housings as smokestacks, a fan as propeller, and other Ford parts to



Full speed ahead!

complete the construction, a realistic ocean liner was produced, from the motometer at the bow to the tail lamp at the stern. As to whether the craft would stay afloat was not the question, since the "waves" were paper. Nevertheless, the exhibit, arranged by the Lanahan Motor Company, attracted considerable interest.

Michigan's Longest Train of Salt



A portion of the 48 solid carloads of salt shipped via Detroit, Toledo and Ironton Railroad.

Traffic men throughout the United States have found the recent movement of Michigan's longest salt train of considerable interest.

On the afternoon of May the eleventh of this year this train, which was the largest train of salt ever forwarded by one shipper at one time from the state of Michigan, left the Worcester Salt Company's Plant at Detroit via the Detroit, Toledo and Ironton Railroad.

This solid train load of salt consisted of forty-eight carloads, approximately two million pounds, most of the shipment being consigned to Wisconsin canners.

Expressing his opinion of the service rendered, one of the Worcester Salt Company's officials wrote:

"The Detroit, Toledo and Ironton Railroad co-operated with us in making this shipment and much credit is due them for

the masterly manner in which the train was handled and the quick delivery made."

The speed and efficiency with which the Detroit, Toledo and Ironton Railroad has handled large shipments has attracted much favorable comment.

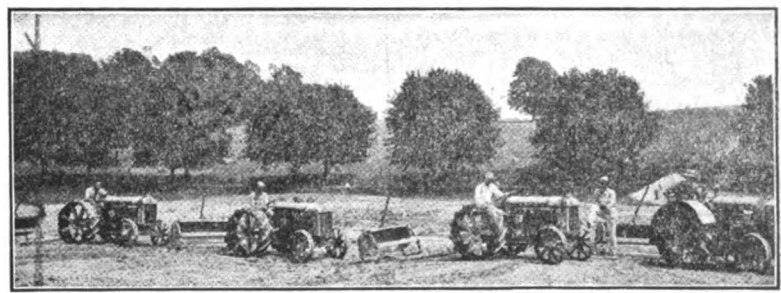
The Crowell Publishing Company of Springfield, Ohio, publishers of *Woman's Home Companion*, *American Magazine* and *Farm and Fireside* ship each month over the Detroit, Toledo and Ironton 18 carloads of magazines for various points from New York to Chicago. Magazines are one of the highest class commodities shipped by freight and the fact that they must be on the news market at a specified time each month makes an unfailing delivery essential.

The fact that these shipments as well as many others of similar nature are made via the Detroit, Toledo and Ironton Railroad speaks for itself.

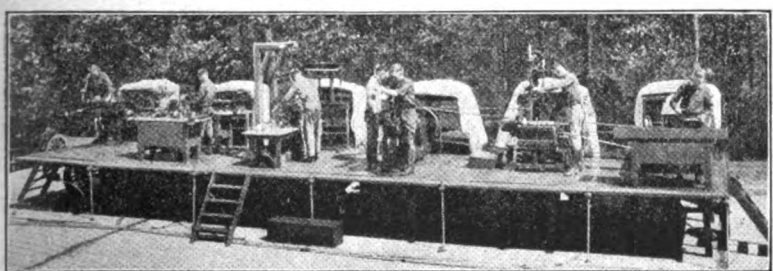
Fordson Chosen for Grading Job

Lewisburg, Pennsylvania—The grading job for the new Bucknell University Stadium at Lewisburg, Pennsylvania, was done entirely by Fordson tractors. The stadium is built to seat 25,000 persons, with the possibility of future expansion to accommodate 5,000 or 6,000 more. A plow and four Fordson tractors with scoops were used in the process of excavating. As the plow tore up the

ground the tractors scooped the loose earth up and moved it to the lower places provided for that purpose. Professor Burpee, who had charge of the work, after trying out several methods of grading, decided that with the use of Fordson tractors the work would be done quickly, efficiently and economically. The result proved that he was justified in that belief.



The four Fordsons that did the grading for the new Bucknell University Stadium.



Ford service caravan, showing shop platform arranged on backs of six Ford trucks.

WWI Programs

Concluded from page 5

popular dance music to be broadcast from radio stations. The program from WWI on the evening of July 5 filled that demand to a large degree. An orchestra from the Ford Motor Company Band opened and closed the program, and also played a number of selections throughout the entertainment, all of which were of the popular type which set dancers' feet in motion.

On the other hand, it was a rare privilege for music lovers to hear Jack Middlewood, the boy soprano, in the selections he sang on this program, which included, among others, "Absent," by Metcalf, and "Mother Machree," by Chauncey Olcott and Ernest Ball. His clear, bell-like tones and fine enunciation and expression marked this music as distinctly of unusual beauty, and was thoroughly enjoyed by all who listened in.

Jack Middlewood was accompanied by Mrs. Alvah Brachman at the piano. Mrs. Brachman also delighted our listeners-in by several charming soprano solos, among them "Moonlight and Starlight," by Gilbert, and "Grandma," by Sachs. Her selections were all of genuine charm and wide appeal, and the fine, well-trained voice of Mrs. Brachman irresistibly carried the listeners into the mood and spirit of the songs. The background of the accomplishments, which were played by Miss Maude Gregson, also greatly enhanced the beauty of Mrs. Brachman's songs.

Mr. Basilio Nuesca, a Filipino, added further variety by his ukulele solos, including "La Paloma," which he sang also, and his steel guitar solo, "Manila Memories."

The health talk, by Dr. E. C. Davidson, of the Department of Surgery of Henry Ford Hospital, brought attention to the too often overlooked item of "Water as a Health Factor." Dr. Davidson called attention to the fact that water has been used for medicinal purposes from earliest times and emphasized the prime importance of its use in our daily lives if we are to retain that priceless boon, good health.

Future Programs Station WWI

July 25, 1923.

Commencing at 8 p. m.

Orchestra Selection—*The Dervishes*, F. Nataniel Dance, Theodore Bendix; by Ford Motor Company River Rouge Plant Orchestra.

Vocal Solo—*Rosemary for Remembrance*, Hill; *Mammy's Song*, Ware; by Mr. Victor Shevlin, accompanied by Miss Irene Doe.

Orchestra Selections—*Barney Google*, Rose and Conrad; *Yes, We Have No Bananas*, Silver and Cohn; by Ford Motor Company River Rouge Plant Orchestra.

Soprano Solos—*Little Grey Home in the West*, Selected; by Miss Laura Johnson, accompanied by Mrs. R. T. Sylvester.

Health Talk No. 71—*The Present Status of the Treatment of Disease—Physical Therapy*, seventh of series; by Dr. F. J. Sladen, Physician-in-Chief, Henry Ford Hospital.

Orchestra Selection—*Dreamy Melody*, Valse lento, Koehler, Magine and Nasit; by Ford Motor Company River Rouge Plant Orchestra.

Soprano Solos—*Barefoot Trail*; *Call Me Back*, Pal o' Mine; by Miss Laura Johnson, accompanied by Mrs. R. T. Sylvester.

Orchestra Selection—*Melodie*, Massenet, Opus 10; by Ford Motor Company River Rouge Plant Orchestra.

Vocal Solos—*Irish Love Song*, Lang; *When My Ships Come Sailing Home*, Dorel; by Mr. Victor L. Shevlin, accompanied by Miss Irene Doe.

Orchestra Selections—*A Musical Thought*, Reverie, Titlebaum; Selected; by Ford Motor Company River Rouge Plant Orchestra.

August 1, 1923.

Commencing at 8 p. m.
Wave Length 273 meters.

Hawaiian Songs—*a. Instrumental—Hilo March*; by Berger; *b. Song—Ona-ona*; by Nape; *c. Instrumental—Keoni Waltz*; by Kaahue; *d. Song—On the Beach of Waikiki*; by Henry Kallimal; *e. Instrumental—Kokala March*; by Lua; *f. Song—Old Plantation*; by Nape, Ford Hawaiians.

Tenor Solos—*Mountain Lovers*; by Squire; *Sing me the Songs of Araby*, Clay; by George Thorpe, accompanied by Miss Dorothy Stanley.

Soprano Solos—*Carmena*; by Wilson; *Mother Machree*, Olcott and Ball; by Mrs. Jack George.

Piano Solo—*Au Matin*; by Godard Op. 83, D. M. Radovanovitch.

Health Talk—*The Present Status of the Medical Treatments of Disease Medicine—Eighth of Series*, Dr. F. J. Sladen, Physician-in-Chief, Henry Ford Hospital.

Piano Solo—*Melodie*; by Rubenstein Op. 3 No. 2, D. M. Radovanovitch.

Hawaiian Songs—*a. Kalima Waltz—Instrumental*; by Lua; *b. Song—Rose of Honolulu*; by Kaai; *c. Ellis March—Instrumental*; by Ellis; *d. Song—Honolulu Hula Girl*; by Cunha, Ford Hawaiians.

Tenor Solos—*Two Eyes of Grey*; by McGeech; *It's*, George Thorpe, accompanied by Miss Dorothy Stanley.

Soprano Solos—*Somewhere a Voice Is Calling*; by Tate; *Give Me All of You*, Schwartzwald; by Mrs. Jack George.

Piano Solos—*December*; by Tachainowsky Op. 37 No. 12; Selected, D. M. Radovanovitch.

Hawaiian Songs—*a. Waltz Medley—Instrumental*; by Kaai; *b. Song—Mokihana*; by Kaai; *c. Instrumental—Hawaiian Hotel March*; by Kaluni; *d. Song—lauka*; by Kaai; *e. Song—Aloha Oe*; by Liliu, Ford Hawaiians.

August 8, 1923.

Commencing at 8 p. m.
Wave Length 273 meters.

Orchestra Selections—*Minuet Royal*; by Pressard, *Andante*, Marie; *Journey's End*, Fox Trot, Tierny; by Orchestra from Ford Motor Company Band.

Tenor Solo—*O Sleep, Why Dost Thou Leave Me*, Handel; by Sidney Johns.

Contralto Solo—*One Fleeting Hour*, Dorothy Lee; by Edna Reicks Dawe, accompanied by Mrs. Henry Hosmer.

Readings—*Music in the Bush*, Robert Service; *When Malindy Sings*, Dunbar; by H. B. Elliott.

Orchestra Selections—*Apple Sauce*, Freed; *Good Night*, Conrad; by Orchestra from Ford Motor Company Band.

Tenor Solos—*O Flower of All the World*, Finden; by Sidney Johns.

Contralto Solos—*The Morning Is Calling*, Terry; *The Prayer Perfect*, Stenson; by Edna Reicks Dawe, accompanied by Mrs. Henry Hosmer.

Readings—*Playing Tinkertown*, Edmond Vance Cook; *To Be Near Her*, Ben King; by H. B. Elliott.

Tenor Solos—*Your Eyes*, Schneider; *Go Down Moses*, Burleigh; by Sidney Johns.

Contralto Solos—*The World Is Waiting for the Sunrise*; *My Task*, Ashford; by Edna Reicks Dawe, accompanied by Mrs. Henry Hosmer.

Orchestra Selections—*March Siamese*, Lincke; *Selected*; *My Sweetie Went Away*, Handman; by Orchestra from Ford Motor Company Band.

Throngs View 'Ford Age'

Concluded from page 1

additional copies of the film to meet bookings.

At other points the Ford film was projected on the screens at Branches and Dealers' own buildings. This

procedure was very successfully carried out in Milwaukee by the Northwestern Motor Car Company, who put the showing across in great style, using a dance and prize contest to complete the program. Letters of invitation were sent out, with the result that 2,500 persons jammed the building, and two hundred or more were turned away. Milwaukee County Dealers displayed the Ford film to audiences averaging 450 persons.

Cities in the Cincinnati Branch territory, Dayton, Hamilton, Portsmouth, Lexington, Knoxville, Bristol, and Middleton, each had the film for four days. Next in order will be Dealers in other cities and towns who desire to make special showings.

Publicity worthy of advertising experts was showered on "The Ford Age" by the Branches and Dealers from coast to coast. Some very commendable advertising matter has been produced. Attractively printed tickets of admission were distributed gratis to prospects in many places.

More than a year was spent in preparing this motion picture, which comprises three reels, or 2,800 feet. "In addition to being intensely interesting," the reviews read, "it is also a fine example of the modern photographer's art."

It is significant that "The Ford Age" is being accorded a hearty reception by the public wherever shown, whether this be at the Dealers' own shops or the country's finest show places.

Conservation of Forests

Concluded from page 1

are being made in boxes of fourteen different sizes, some filling as many as 100 different needs, and forty-five boxes and crates of different sizes to meet other shipping requirements.

At present the salvage department is turning out an average of 15,000 boxes and crates a day and it is not uncommon for a box to have three or four kinds of wood in its make-up. Recent introduction of burlap bags for making shipments cut the box requirements down about 5,000 a day.

Salvaging proceeds, in a building 80 feet wide by 700 feet long, on the well-known Ford continuous production system. Workmen along the line of a conveyor pick out boards, endeavoring to saw the longest possible pieces from them. Scraps move on to the end where shredders cut them up into small pieces; then they are caught in a suction tube and blown over to the furnace rooms to be used as fuel. Completed boxes move on to departments requiring them.

Two departments may be used to illustrate the great daily consumption of this lumber. The radiator assembly utilizes twenty-two pieces of wood in every crate, and an average of 2,200 of these crates are sent out every day. In a carload shipment of 100 motors, 750 feet of lumber is required for proper bracing and packing. With more than sixty-four of these cars going out daily, a total of more than 50,000 feet of lumber is consumed in this way alone.

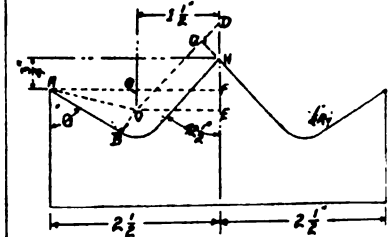
Problems

If there are explanations or comments regarding problems, write the Henry Ford Trade School, Ford Motor Company, Detroit, Michigan.

Solution to last issue's problem:

No. 63

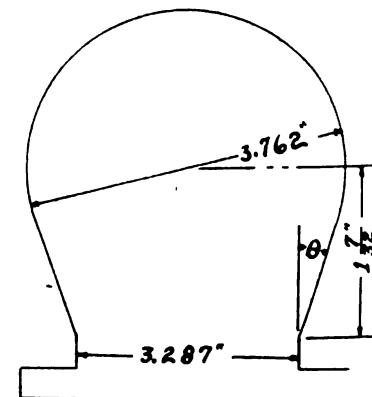
The following drawing has been purposely distorted to bring out details.



DETERMINE ANGLE θ .
 $DE = 1.5(\cot 42^\circ) = 1.6369$
 $DH = 5(\csc 42^\circ) = .7401$
 $EH = DE - DH = .8959$ $FE = EH - 75^\circ = .1459$
 $FE = CO$ $AC = 1$
 $\tan \angle CAO = CO \div AC = .1459 = 8'18''$
 $AO = AC(\sec \angle CAO) = 1.0106$
 $\sin \angle ORB = BO \div RO = .49476 = 29'39''$
 $\angle ORB = 29'39''$
 $\angle CAB = \angle CAO + \angle ORB = 37'57''16''$
 $\angle \theta = 90 - \angle CAB = 52'2'44''$

Try This

No. 64



DETERMINE ANGLE θ .

Fordson Aids in Towing

Washington, D. C.—Hundreds along Pennsylvania avenue witnessed heavy-hauling specialists move 23 tons of structural steel up that thoroughfare to be used in the new Chamber of Commerce Building. A



Fordson and two trucks were employed. A corner of the United States Treasury shows at the right of the photo, and the building directly in front is the Treasury Annex.

Ford News

Volume III. L

Dearborn, Mich., August 1, 1923

No. 19

Half-Million Circulation

Four and One-half Years Being Phenominal Growth

Subscription List Includes Country's Greatest Intellectual Leaders

The Dearborn Independent has passed the half-million mark. This means that in the space of four and one-half years the circulation of this paper has steadily increased until through renewals and new subscriptions it numbers 500,000 subscribers who have paid their money for the privilege of reading it. It means more than that: on the principle accepted in the publishing world, of four readers to every copy of the paper, the readers of The Dearborn Independent now approximate 2,000,000 in number. The actual circulation of the main ideas set forth by the paper is really still much wider, because of the freedom

with which the press of the United States quotes from its columns.

The pride which may be pardonably evident in the foregoing statement does not grow out of the figures. Mere circulation is not all that a truth-telling paper seeks. It is a notable achievement to have found half a million subscribers in less than five years, but there is something

Concluded on page 4

The President en Tour

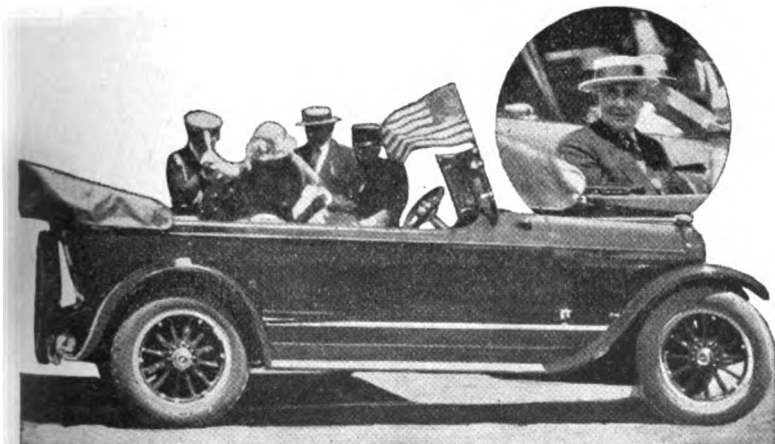
Since the establishment of the Constitution and starting at the time of George Washington, the people have built up a tradition in the form of an inviolable law—unwritten, of course—that the President and the First Lady of the Land shall be accorded the best of everything this land has to offer.

President and Mrs. Harding leave the comforts of the White House on their long journey to the Territory of Alaska, and en

route no effort has been spared to avail them of the country's hospitality.

At every step, whether it be a quiet, small country hamlet, or a throbbing metropolis, the greeting will be the same, just as it has for the twenty-seven Chief Executives who have preceded President Harding.

At Hutchinson, Kansas, Davis and Child Company, Ford Dealers, placed a Lincoln car at the disposal of the Presidential party.



Lincoln cars were placed at the disposal of the Presidential party at several points along the route.

Ford News offers the sum of \$100 as a prize to the person who submits the best descriptive article on the Ford Foundry at the Rouge Plant. The prize-winning article will be published in Ford News and must not contain more than 500 words.

Typewritten copy is preferred.

Use only one side of the sheet.

Write name and address plainly; give badge number.

Address all manuscripts Ford News, Dearborn, Michigan.

This contest will close September 1, 1923.

Final Link Established

Great Lakes Ore Boats Now Docking at Rouge Plant

Change Will Result in an Enormous Saving; Carriers Pass Through New D., T. & I. Bridge

Great Lakes ore carriers can now bring their cargoes direct to the Ford Motor Company's docks at the River Rouge Plant, establishing the final connecting link between the finished product and the source of raw material.

The passage of heavily laden vessels up the River Rouge has brought to a successful termination the project of deepening and widening the old channel, which work was begun in 1917.

At that time, the stream varied from 75 to 100 feet in width and was far too shallow for navigation by deep-draft boats. Small boats, with capacities ranging from 550 to 900 tons, have been transporting the ore from the vessels moored in the Detroit River up the River Rouge to the Ford Plant. Now, however, this extra handling at the mouth of the river in transferring the cargoes is eliminated, and will result in an enormous saving in time as well as money. Under the former method, the small boats were barely able to fulfill the minimum requirements of the Blast Furnaces, amounting to 750,000 tons annually; but by means of the new waterway the Ford Motor Company expects to bring in close to 2,000,000 tons of ore and limestone this season. The giant storage bins, capable of holding more than a million tons, will be filled to the limit, to tide the Plant over the season of closed navigation.

The first trip up the new river was made by the steamer *Oncida*, with government engineers and Ford Motor Company officials on board, July 2. The first vessel to discharge a cargo of ore was the steamer *Cletus Schneider*, which swung around in the Ford turning basin and pulled up alongside the unloading slip on July 11. The boat entered the channel on a Wednesday evening and had deposited her 5,300-ton cargo by noon of the next day. Although the reconstructed waterway has not been officially opened by the government, traffic has proceeded and ore carriers have been making passages at the rate of three a week.

The development of this water

Plants Continue High Output Pace

Domestic Assembly Plants of the Ford Motor Company swung into production for the second half of the year with a continuation of their record-breaking pace.

For the week ending Tuesday, July 24, 40,930 Ford cars and trucks were produced, representing an increase of 127 over the best previous week. The output of Fordson tractors totaled 1,882, while 210 motor cars were made at the Lincoln Division.

The week preceding this, which

On July 17 the Hamilton Plant turned out 8,258 wheels during the sixteen-hour working day. This is a new high record for a single day's production, the previous record being 8,043. In addition to wheels, production is also steadily increasing on the numerous other parts being manufactured at the Hamilton Plant.

ended July 17, saw 40,803 cars and trucks leave the assembly lines. For the same period, the River Rouge and Lincoln Plants produced 1,131 tractors and 206 Lincoln motor cars, respectively.

Motor No. 8,000,000 was made July 11. On January 17, Motor No. 7,000,000 was turned out, establishing a record of 1,000,000 motors in less than six months. The Company required twelve years to make its first million motors, and six months to make its seventh million.

Concluded on page 4

Ford News

ESTABLISHED 1920

Issued for the employees of the
various Ford Interests.

Vol. III, No. 19

August 1, 1923

PUBLISHED SEMI-MONTHLY

Motto

When figures and philosophy agree, we are hitting near the truth. The figures show that in this matter of getting a living about two per cent of human energy is expended on the production of food. And the philosophy of life indicates that our principal business on this planet is the gaining of experience. From these may be deduced the principal objects of life. More mental energy is wasted in fear concerning our "living" than is actually used in securing a living. There is no comparison between the degrees of physical and mental energy expended in that matter. Living actually comes much easier than we suppose—save for anxiety, fear, pride, jealousy and other wasteful uses of energy. Stopping the leaks in our mental power plants would double the ease of living.

—Henry Ford.

Luxury or Necessity

It is amusing to note the regard held in some quarters for the wage earner. He is advised what to do with his money in preparation for that day, which never should come, when he must needs draw on his savings while unemployed. A Buffalo critic of the automobile as a luxury warns wage earners that the ownership of one should not be aspired to. Put your money in a savings account is the tenor of his gratuitous admonition.

These self-appointed counselors rarely go below the surface in their study of economics. They do not know that it is really an evidence of thrift to own an automobile, if one is a worker, and that its use will enable him to increase his savings. That is why so many bankers advise even going into debt to secure a car. And that is why, in a majority of cases, the car-owner has more money in the bank than the man without a car, although both may receive the same compensation.

The man without a car must reside within reasonable distance of his employment. That means, whether he owns his home or not, a high cost of living. It means recreation and amusement for himself and family must be limited or secured at consid-

erable expense. It means life in cramped quarters—mere existence.

The car owner can reach his work from a distance twice or three times as great in less time, can reside in the suburbs, with ground for garden and flowers, room for chickens, if he cares to keep them, and opportunity for pleasant and inexpensive recreation at any time. His family will be in more healthy environment, and his living expenses cut in half.

The multitude of cheap new cars, and the always present used car afford the worker ample opportunity for real economic investment, and nobody who has owned a car will willingly be without one.

The automobile is a luxury, indeed, but more than that it is a necessity, especially to the worker who has utilitarian use for it. It is also a fine investment for character building, since in recreation it takes the place of silly and expensive indulgences.

The American Workman

Professor Dr. Friedrich Dessauer, director of the University for Natural Science at Frankfurt on the Main, Germany, gave his impressions and observations while in the United States in a series of letters written to a friend. Especially interesting is the letter which deals with "The American Workman," giving the views of this noted stranger.

In the United States the workman is a gentleman who feels himself on a footing with everybody else. He has reached the highest rank: that of being a CITIZEN. Here, in America, the workers do not only exist, they LIVE. That is to say, their labor not only meets their needs, but much more. Their savings are surprisingly large. Many of them come to work in their own motor cars and they converse with everyone as their equal. What with us is "allowed," the American worker takes as a right, won by honest and strenuous labor, and gladly given by those with and for whom he works. From first to last the American worker LIVES. It is mutually understood that by right he should live, and not merely exist.

The European class distinction is totally unknown here. The respect paid by the worker to learning and rank is always spontaneous. No labor is dishonorable. The worker is welcome and respected everywhere, provided he lives well, acts decently and pays what he owes. For him as for everybody else there is a chance to reach the top. It is no impediment in one's career that his parents were poor.

This condition unites a nation. Of it we must say to them: "Well done." It gives them strength beyond their own domain.

Professor Dessauer ends his letter with the information that the married life of the American worker is purer and more durable than that of his comrade in Europe. And he concludes by saying: "I have noticed errors and faults, of course, but the rule in American life is: civic spirit, youth and power."

Tobacco, Tombstones and Profits

"It Half-Kills," Declares Famous Naturalist; Emphasizes Economic Waste

By LUTHER BURBANK

You have seen pictures of military cemeteries near great battlefields. Upon every headstone is chiseled the inscription, "Killed in action."

If one knew nothing about war, these headstones would be sufficient to impress upon him that war is deadly—that it kills.

How much would you know about tobacco if, upon the tombstone of everyone killed by it were inscribed, "Killed by tobacco"?

You would know a lot more about it than you do now, but you would not know all, because tobacco does more than kill. *It half-kills.* It has its victims in the cemeteries and in the streets. It is bad enough to be dead, but it is a question if it is not sometimes worse to be half-dead—to be nervous, irritable, unable to sleep well, with efficiency cut in two and vitality ready to snap at the first great strain.

Chewing and smoking are set forth by the tobacco trusts as delightful, harmless pastimes. It is even declared that the use of tobacco is beneficial—that it "soothes" the nerves.

Chloroform soothes the nerves, too. A small bottle of it will soothe them forever.

Let me tell you how tobacco kills. The victims do not die on the premises, even when sold the worst cigars. They go away, and when they die, the doctors certify that they died of something else—pneumonia, heart disease, typhoid fever, or what not.

In other words, tobacco kills indirectly and escapes the blame.

What killed General Grant? Why, of course you know—cancer. But what caused the cancer in his throat? Do you know? Smoking caused it. General Lee could not get Grant, but tobacco got him.

But the case for or against tobacco cannot be conclusively proved

by what happened to this or that man. The point I am trying to make is that when the pinch comes everyone has need of all the heart-power he can muster—and tobacco weakens heart-power. There is no doubt about that. When one's heart is faltering, no doctor ever prescribes nicotine. Nicotine is a slow poison that strikes at the heart first.

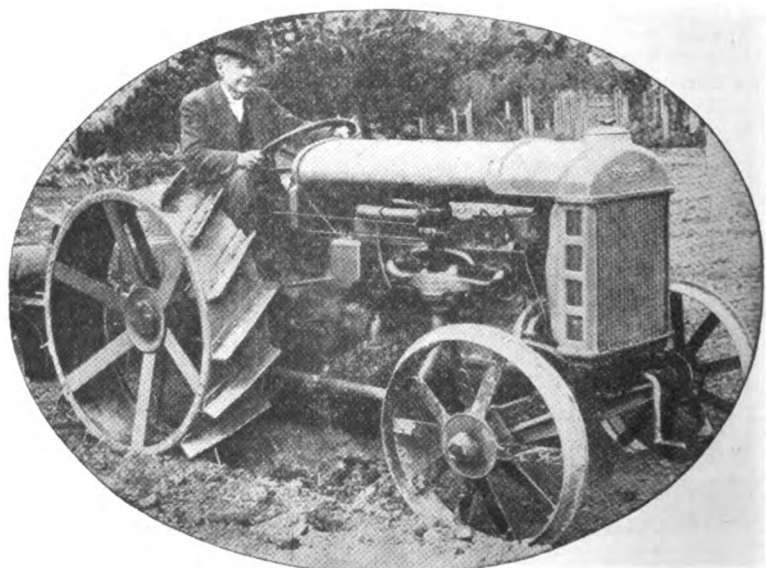
Nicotine, after you have used it a while, puts you in a condition to be "bumped off" by the first thing that hits you. If you saw some men undermine a building until it was ready to topple into the street, and then saw a woman hit the building with a baby carriage and make it topple, you would not say the woman wrecked the building, would you? Yet when a smoker dies of pneumonia the doctor's death certificate gives pneumonia and not tobacco as the cause of death. And the tombstone man with his chisel says nothing at all.

What a shock people would get if they went through cemeteries and saw tombstones declaring the fact that this man died of typhoid made fatal by a tobacco-weakened heart, and that man succumbed to nervous prostration because tobacco had shot his nerves to pieces, and another one gave up the ghost because tobacco had ruined his stomach.

But the truth will never be known about tobacco so long as the great tobacco companies are able to spend millions of dollars to build up and maintain businesses with which to poison the people for a profit.

No matter where a boy may be, tobacco advertising reaches him, pleads with him and urges him to be a fool—to injure his health, decrease his happiness and shorten his life that

Concluded on page 3



Luther Burbank on the first Fordson tractor.

Digitized by Google

Tobacco Half-Kills, Declares Burbank

Concluded from page 2

the tobacco interests may gather more millions.

If the money that the American people are wasting for tobacco were invested in homes, every man and woman could have a home, free of debt, before reaching the age of fifty.

If it were invested in farms, everyone could have a farm.

If it were invested in reclaiming deserts that, with water, would be orange groves, the present century would see the end of most of the deserts.

If it were invested in stock in water-power companies honestly and wisely managed, the harnessing of power now going to waste would make heat, light and power abundant and cheap.

If it were invested in traveling, the saving would be sufficient to enable everyone to see all America several times and take at least one trip around the world.

And, at that, the greatest loss is in health and life. The basis of all happiness is health. A sick millionaire is much worse off than a well garbage man. Sickness not only cuts off happiness but brings discomfort and pain.

Always remember that the tendency of tobacco is to destroy.

Make no mistake. Tobacco is a poison that would not be urged upon you if there were not a profit for others in making you a victim.

Within my own circle of friends and acquaintances I have known many, or at least several, men whom it has killed.

I never met a tobacco-user who did not regret that he had formed the habit, but I never met a non-smoker who was sorry he did not smoke.

Isn't that significant? If tobacco is such a fine thing, why don't its victims rejoice? Why do not men like Woodrow Wilson hasten to acquire the tobacco habit? Think this over.

Youth is the dangerous age, as far as tobacco is concerned. If one can reach the age of twenty-five without smoking, the tobacco trust will have difficulty in getting him.

We are in the process of driving alcoholic beverages from the country. The death rate all over the country has taken a sharp drop to the lowest point ever reached. In my opinion the day is not far distant when we shall outlaw tobacco as we have alcohol. I believe tobacco shortens more lives and kills more people than

Reports have been received at the home office that a number of the Branch Factories are painting their machines and compressors a red or maroon color. The standard color for machines as adopted by the Ford Motor Company is blue.

Red is only used to designate fire apparatus or dangerous places.

alcohol ever did, not because tobacco is more deadly, but because it is more widely used than whisky ever was.

We shall have better health, more happiness, longer life and more comforts when we cease wasting our money for tobacco and whisky. There are now plenty of persons who will hoot at this statement, but in a few decades there will be a hundred millions or so who will hoot at the present hooters.

—The Dearborn Independent.

Records Prove Tractor an Economy

The quintet of Fordson tractors shown here replaced 4 one-horse wagons, 2 two-horse wagons and a three-ton truck formerly used by the Street Department of the city of Richmond, Indiana.

The old equipment was hired by the day to haul trash and rubbish from the alleys. In this manner a great amount of money was expended, and now, through tractor use, it is possible to do three times the amount of work with a smaller number of men.

Each tractor, drawing a train of two trailers, is operated by three men, one of whom drives while the others load. This system achieves a continuous process, for as soon as one train is loaded there is another waiting ready to be filled.

In summer the outfit is street maintenance and repair work. The city has its own sand and gravel pits from which material for unimproved streets is hauled. A device enables the operator to spread the load evenly over the ground if desired.

Richmond is keeping an accurate account of each unit and it will be interesting to learn how much is being saved taxpayers through the new method of handling this phase of the city's work. Richmond is only one of the many American cities that know the value of time and money-saving equipment.

Division of Records Keeps Henry Ford Hospital Data

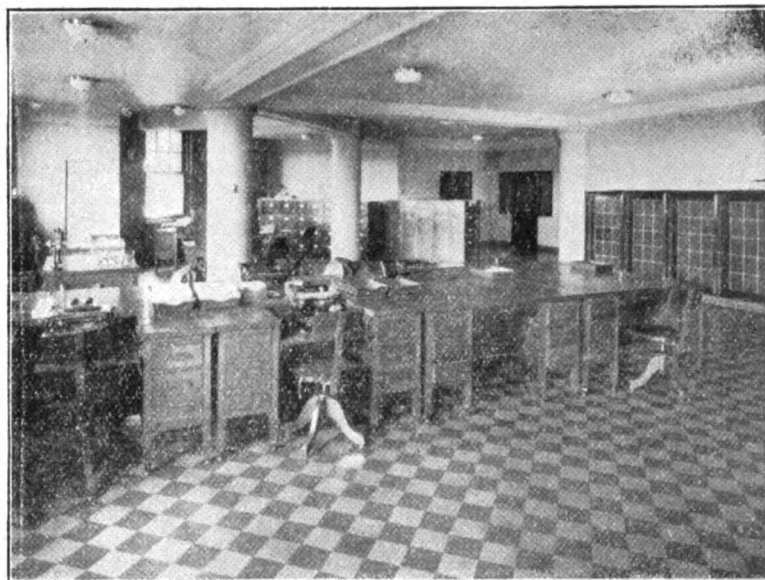
Important Details Cared for by Central Filing System

The Division of Records at the Henry Ford Hospital is located on the second floor of the main building in the diagnostic unit, and is thus situated to facilitate immediate service in the circulation of all records throughout the hospital.

This division acts as a central filing system, handling all patients'

betical or name index which records this number.

When a patient comes for treatment his record is requested from this division and is immediately withdrawn from the file. Before sending record, however, a charge card is filed showing date, patient's name, case number and doctor to whom record is sent. This makes it possible to trace very easily 3,000 or 4,000 histories which might be outstanding. The true success of this system, however, rests with all



All important records are kept here; the history of every case is carefully preserved.

records, general correspondence and disease index.

There are approximately 30,000 case records of which between 1,000 and 2,000 are in circulation daily. These do not travel by messenger as in most large corporations but are sent from the central filing room to all units and floors by means of an electric automatic carrier.

All data concerning a patient are sent from the various departments, namely, Surgical, Medical, Laboratory, and so on, where they are sorted and compiled in book form. These books are letter size and contain complete information regarding the patient's case. They are filed numerically according to the case number assigned to patient at first visit, which number he retains throughout his entire course of treatment. One might here ask what would happen if a patient forgot his number, but this is solved by a small card alpha-

departments in making certain that each record is returned to the central files at the close of each working day, at which time records are restored to their proper place and charge cards removed.

The last and perhaps most important feature of the Division of Records is the Disease Index. It comprises all the disease statistics, which are compiled according to the Dewey decimal system, the work being done immediately upon the completion of the diagnosis of a case. This enables a doctor to collect a total number of cases treated for a certain disease, or with specific associated symptoms.

One Ounce of Gold

Pays wages for—

Twenty hours work in the United States

Fifty hours work in Great Britain

Ninety hours work in Japan

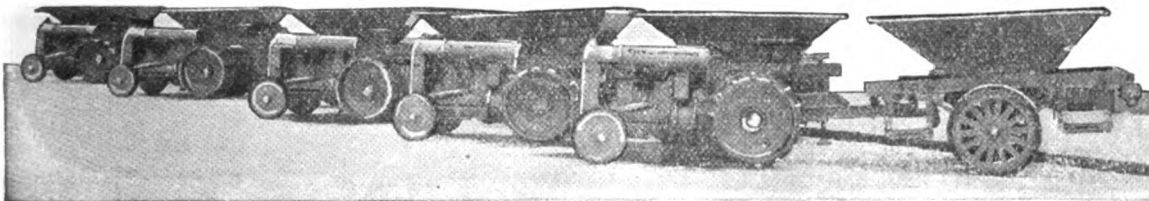
One hundred hours work in France

Two hundred hours work in Germany

This means that:

Americans must maintain their past record for high output per man to guarantee prosperity which will mean jobs for all of us.

—American Educational Association.



Five Fordsons employed by the street department of Richmond, Indiana, save the city money.

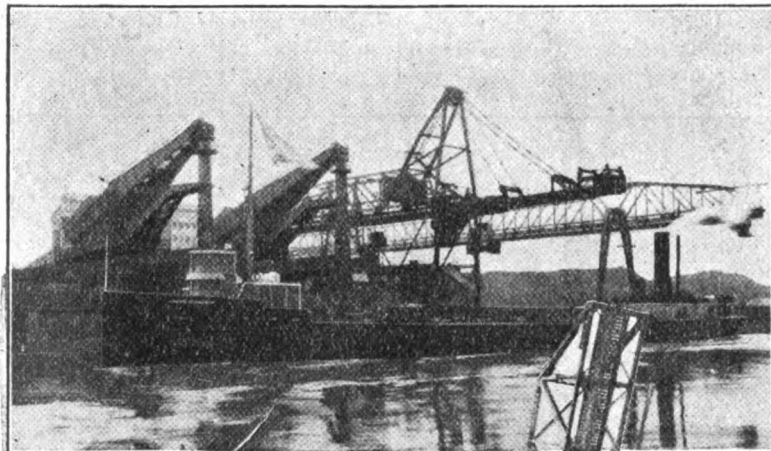
Final Link Established

Concluded from page 1

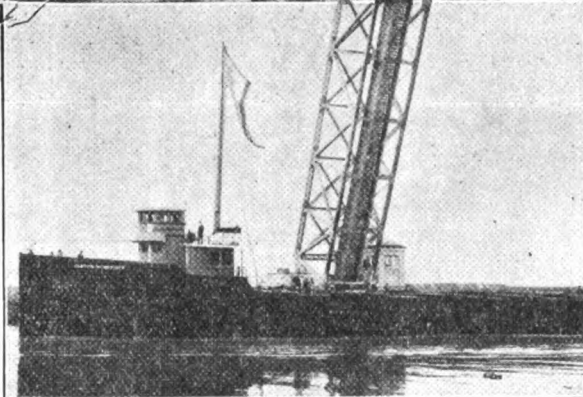
route forms one of the most interesting, and, from an industrial standpoint, important navigation ventures in the country's history.

The estimated expenditure for the work, covering the dredging, right-of-way and five new bridges, is \$10,000,000. In addition to adding six miles to Detroit's waterfront, the new river establishes the River Rouge Plant as a Great Lakes port. The short-cut canal helped reduce the old

and consists of a single stationary span 151 feet in length, with a total weight of approximately 500 tons of steel. This span is raised by means of a counterweight weighing 750 tons, composed of a mass of concrete masonry made from cement, steel punchings and iron borings. The bridge is pivoted on steel trunnions 22 inches in diameter, and carried on four huge girders weighing thirty tons each.



Above—Steamer *Cletus Schneider* docked at Rouge Plant; Hullett unloaders in the background. Right—The new D., T. & I. bridge across the short-cut canal raised to allow the passage of the first ore carrier.



course by one and seven-eighths miles, making the distance from its mouth to the turning basin three miles. The surface width is now 300 feet, which tapers to a bottom width of 200 feet. The average depth is 22 feet, sufficient for the largest Great Lakes deep-draft vessels.

The newly completed docking slip at the Rouge Plant is constructed of concrete, and is 2,614 feet long by 250 feet wide. Here two Hullett unloaders quickly dispose of the steamers' cargoes, each having a capacity of 500 tons an hour. Both of the Hullett units can readily unload an ore boat of 10,000-ton capacity in little more than the eight-hour working day. There is another unloading unit, used primarily for coal, but which can be adapted for unloading ore.

The Detroit, Toledo and Ironton Railroad bridge, one of the five new spans which cross the water route, is a decided departure from the usual type of railroad bridge construction, and is known as a single-leaf bascule type.

This structure, which crosses the short-cut canal, is nineteen feet wide,

However, unlike other bridges of this type, the huge masonry counterweight is not carried overhead in plain sight, but swings into a pit below the track level. This pit is thirty feet deep below the tracks and forty-five feet square, and in itself presented a considerable engineering problem. It is supported on four concrete caissons twelve feet square which extend down 75 feet below water level to hard pan. These were sunk by the pneumatic process which made it necessary for men to work under an air pressure of thirty-five pounds.

The bridge is electrically operated from an upper room located at one side of the counterweight pit, the motors and machinery being situated in enclosures on either side of the bridge.

One minute is the time required for lifting the bridge, which is accomplished in one complete operation, including opening the interlock devices.

Work was commenced on the structure in August, 1922, and the bridge was first lifted on June 13 of this year.

Half-Million Reached

Concluded from page 1

more valuable than Subscribers and that is Readers. The Dearborn Independent is a paper that is read. Its subscribers become its readers, and its readers become its friends. This, of course, could have become possible only on the ground that The Dearborn Independent is really independent, really honest and really informed in its work as "Chronicler of the Neglected Truth." Its readers have learned to know how thoroughgoing is all its work in search of the exact truth.

As short a time as The Dearborn Independent has been before the public, it is nevertheless long enough to have tested its more adventurous undertakings to date. Some of its campaigns, bitterly opposed at first, are now conceded to have profoundly influenced the thought of the nation; those who most strongly denied our statements three years ago are now circulating them as the commonplace of information.

Another source of pride is the distinguished roster of readers which

Demurrage Records

| Branch | Period Months | Cars Handled |
|---------------|---------------|--------------|
| Oklahoma City | 23 | 9,504 |
| Milwaukee | 21 | 13,571 |
| Pittsburgh | 20 | 19,986 |
| Des Moines | 24 | 23,040 |
| Kearney | 24 | 43,284 |

As one Branch Manager writes, "These are certainly targets to shoot at."

we have. It is a pleasure to state that from the subscription list of The Dearborn Independent could be selected the intellectual leadership of the United States.

The half-million mark is only a halfway house in the history of this paper. By continuing to serve the people with facts and carrying out Ford ideas for the public good, the future growth of the paper is already assured.

The Prince of Wales is an adept trap drummer.

City's Expenses Reduced by the Use of Fordson Tractor

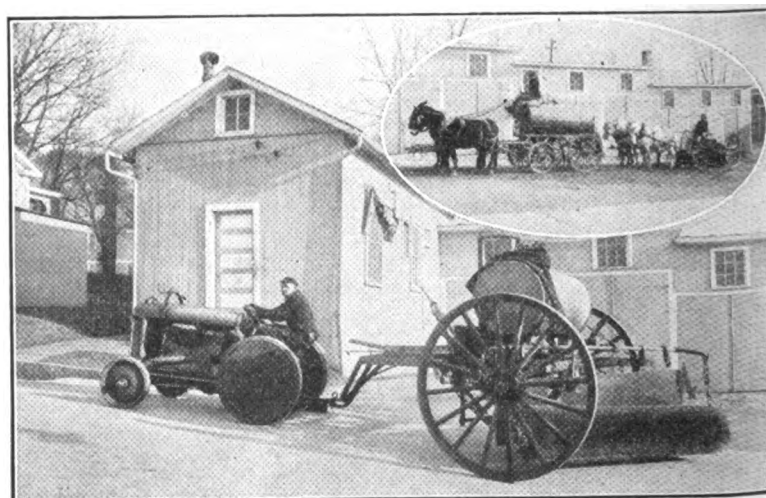
Municipal Engineers Praise New Equipment; Horses Discarded

Engineers of the city of Lynchburg, Virginia, are high in their praise of Ford Motor Company. From the time the first Ford car was purchased by the city, they have been constantly adding Ford products to their equipment. This is sufficient evidence that the requirements are being satisfactorily met.

The latest addition to the "City of Lynchburg Ford Family" is the Fordson. And with its appearance three horses and three mules were disposed of. A Fordson now takes the place of these six animals and at a much lower cost. Figures submitted by City Manager E. A. Beck reveal that since the tractor was purchased the

cost of sweeping one block was reduced from \$1.26 to 91 cents. This is a saving of 35 cents on only one block. To appreciate fully the value of the Fordson it must be considered that Lynchburg is a city with a population close to 35,000. The Fordson working only one day can save a considerable amount of money and at the end of the year will turn out to be a splendid investment.

Fordsons are being used by a number of cities in their Public Utilities Department. "Best of results" is the report from every city manager or engineer when asked his opinion of the Fordson.



City of Lynchburg, Virginia, finds the Fordson saves 35 cents on every city block cleaned. Insert—Old equipment.

Xylophone Artist Plays for WWI Audience

Several New Musicians Make Radio Bow

As the microphone at Radio Station WWI, on the evening of July 11, caught the voice of the program announcer, and the ether waves carried his words to the invisible audience, the family of radio fans were in readiness for the program of treats which was to distinguish the evening's session.

"The Old Home Town," a piano solo by Miss Helen M. Taschner, opened the program.

This selection showed

Rev. R. M. Crissman

her to be a musician who plays with real feeling.

Always welcomed by our listeners-in, Mr. Joseph Atkinson sang several very beautiful tenor solos on this evening. His clear, melodious voice went out remarkably well, and his selections on this program were of universal appeal. He was accompanied by Miss Ivadel Moore at the piano.

The lilt of the bagpipe had never been sent out from WWI before this evening, and lovers of this Scotch variety of music were delighted to hear the good old pipes through the night air. A number of excellent bagpipe selections were played by the Highland Park Highlanders.

Miss Dale Bostwick

Miss Dale Bostwick made her bow to WWI listeners-in on this evening. Her solos

were most enjoyable, for she made the listener feel the swing and beauty of the music, in addition to a very good enunciation of the words and happy phrasing. Her voice was remarkably clear and well adapted to radio. She was accompanied by Miss Mary McLeod at the piano.

In view of the fact that we are turning our attention to

Mr. J. A. MacCallum

Alaska in following our President's trip to that county, the talk by Rev. Ralph MacClay Crissman on "Alaska—A Land of Promise" was not only of compelling interest, but also timely. A copy of this talk will be sent to those sending a request for it to Ford News, Dearborn, Michigan. It is Talk No. 69, and should be requested by number.



Miss M. MacCallum

During the July 18 program, the week following, there was entertainment aplenty in the air. The evening's numbers of vocal and instrumental offerings were nicely supplemented with readings and a lecture.

The unusual and difficult feat of

Copies of the Health Talks broadcast from Radio Station WWI, the Ford Motor Company, Dearborn, Michigan, will be sent to those who request them. Kindly request by number.

playing a xylophone with four mallets was skillfully accomplished by Mr. J. A. MacCallum, Ford Dealer from Marlette, Michigan, who offered, unaccompanied, a beautiful rendition of the old favorite, "The Last Rose of Summer." Hardly any instrument surpasses the xylophone for popularity with radio "listeners-in" and so Mr. MacCallum was called back for two additional selections. Accompanied at the piano by his daughter, Miss Marguerite MacCallum, the xylophonist rivaled his earlier number with "Schön Rosmarin," by Fritz Kreisler, and "Mighty Lak a Rose." As his finale, Mr. MacCallum played Nevin's "The Rosary," achieving a fascinating harmony through his masterly use of four mallets.

Playing "Tarantella," by Heller, and "Moonlight Revels," by Andre, Miss Ruth Burton, pianist, displayed in these selections a deft touch and a confidence that marks her as an artist of thorough learning.

Miss Mabelle A. Knowlton sang that well-known epitome of Negro life, "Hard Trials" with just the proper spirit and expression to give

Concluded on page 8

Banks Use Window Displays to Advertise Ford Purchase Plan

'Silent Salesmen' Make Attractive Presentations of Idea to Public

An increased effort on the part of Ford Dealers throughout the country to develop interesting and attractive window displays makes it sufficiently evident that the agents are cognizant of the fact that show windows are important factors in any business which cannot well be neglected in these days of keen competition and external appearances.

The announcement of the Ford Weekly Purchase Plan offered Deal-

ers an immense opportunity in this regard for the use of good advertising ideas, and many noteworthy displays have been evolved by those who selected show windows for their medium of publicity.

Dealers who are out for every possible enrollment they can secure are leaving no stone unturned to present benefits of the Purchase Plan to the public and to establish the strongest possible contact with prospects.

Numerous banks interested in the Ford Purchase Plan have taken an active part along this line, and, co-operating with Ford Dealers, have devoted their window space to effective presentations of the idea to their patrons and the general public.

Needless to say, the publicity gained by this means is enormous and it would be difficult to estimate its value.

In almost every instance the most successful of these window displays have not been overly elaborate or expensive; they were simply neat and clean, and included no features that

might repel rather than attract the passers-by.

During spring and this summer, in dressing windows for this purpose, the tendency has been to incorporate some sort of "outdoor scene" with the "selling talk," thereby achieving the quality of timeliness.

Of such a type, for example, was the beautifully prepared exhibit arranged by the Williamson Motor Company, Dealers at Rockford, Illi-

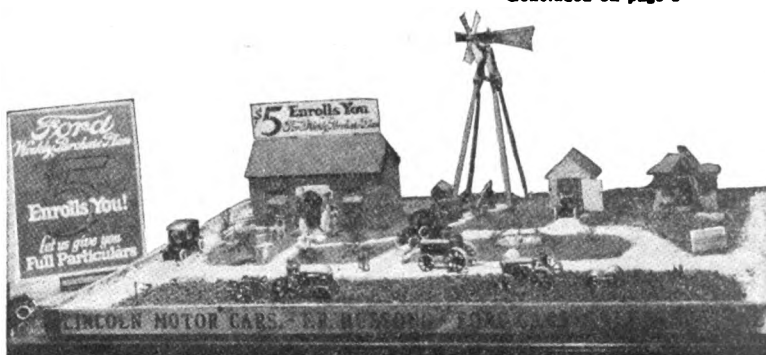


This display by a bank helped "roll up the enrollments."

nois, in conjunction with their bank. This showed four miniature "Ford" cars in the country, two of which had pitched camp. Grass, winding roads, a lake with boat, a log cabin and trees, all gave the scene a very realistic and seasonable touch. Attractively painted posters which did not occupy too much space delivered the sales message. One of these read: "Following our policy of extending the facilities of this bank in whatever way we can to serve the public, we have arranged to give our co-operation to the new Ford Weekly Purchase Plan.....Come in and let us explain, or, if you wish, see the nearest Ford Dealer for further details."

Many Dealers not limited in their

Concluded on page 8



F. R. Hussong, Dealer at Lincoln, Nebraska, put on this attractive display. Note the minute details that went into the make-up.

That Right of Way! Who Has It?

It is surprising how many motorists are unfamiliar with the common rules governing the right-of-way at street intersections. A great many accidents on our city streets as well as on the main traveled highways at important road intersections are due to the incorrect manner in which some driver has made the crossing. Where the law governing the right hand intersecting way is understood collisions are relatively infrequent.

Briefly this law provides that the driver approaching from the right has the right-of-way, provided that both are nearing the corner at approximately the same speed and are equally distant from the corner. This rule, if followed, would make the crossing of street intersections very simple. Every driver would have to watch only the traffic to the right.

A study of the diagrams below will disclose practically every combination of circumstances that a driver will be called upon to face at street crossings. In every case the black car has the right-of-way over the outlined car. The car following the dotted line must slow down or stop to allow the other car to pass.

Some News Notes From the Ford Safety World

The real Ford spirit was shown recently when 460 out of a total roll of 492 employees and executives of the Seattle Branch turned out at a Safety "Get-together" meeting. Mr. Arthur Frederick Sheldon, a nationally known educator, attended this meeting and gave a very interesting and inspiring address on the subject, "Manpower Building."

The Safety Department of the Lincoln Plant has sent the following suggestions to all paint departments:

1. Rooms should be well ventilated.
2. All liquids used for thinning, and so on, should be kept in closed containers.
3. When sandpapering lead-painted surfaces the operator should wear a respirator. A better method is to use sandpaper and oil.
4. All dipping tanks should be well ventilated by means of properly constructed exhaust hoods.
5. Working clothes should not be allowed to become dusty (lead dust) but should be frequently cleansed.
6. Proper washing facilities should be provided. This should preferably consist of individual bowls. There should be a plentiful supply of hot water as it is almost impos-

sible completely to remove paint with cold water.

7. The hands should be carefully washed before conveying food to the mouth.

8. Thoroughly rinse the mouth before eating.

One of our men pulled one switch on a spot welder and did not know there were two switches controlling it. Result—when he attempted to work on the electrical parts, his hand was severely burned. He lost one finger. Welders are now being changed so there will be one 4-pole switch instead of two 2-pole switches.

When working about furnaces, the following should be remembered:

1. Do not mix Cyanide with Nitrate—it will explode.
2. Blow out furnaces with air before lighting.
3. Do not put cold stock in cyanide furnaces.
4. Do not put wet stock in cyanide furnaces.
5. Always use goggles when working on furnaces and when cleaning out slag hole.
6. Keep cyanide in a dry place.
7. Keep floor around cyanide furnaces dry.
8. Look out for any water leakage from pipes, roof, and so on, above furnaces.

By observing these simple rules accidents will be prevented.

Care should be taken in the handling of umbrellas. Recently an em-

ploye came running into the Plant out of the rain, closing his umbrella on the run. He missed a man's neck by an inch when bringing the point down.

History tells us certain kings slept while cities burned. But if an oiler is asleep while on his job he may expect a hot time at any period during his sleep. Machines and shafting bearings require oil, but it requires a safe oiler to apply it successfully. To do his work safely, the oiler needs a clear head not dulled by lack of sleep.

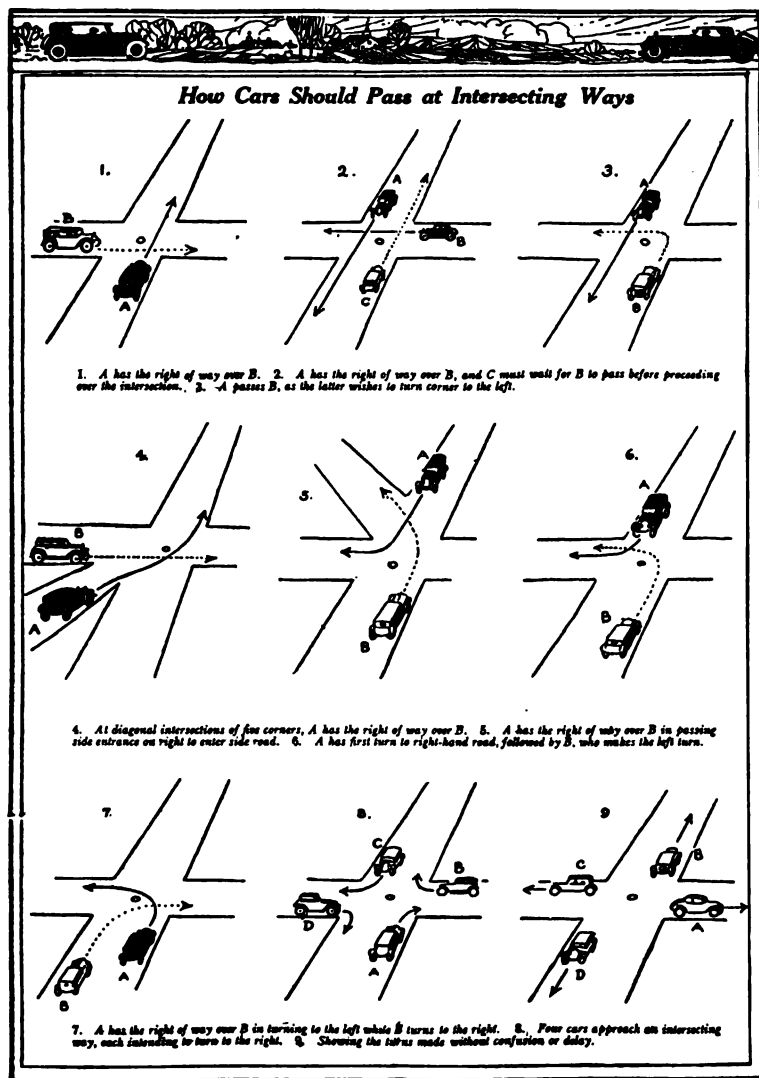
Mr. Walter R. Roberts, No. L-7947 of the Gear Department at Highland Park Plant, writes a very interesting letter showing his reaction to our "Safety First" film. Mr. Roberts says, "The chance-taker is bound to be the accident-maker. In practically every case of accident, the thinking is done by the unfortunate victim after injury instead of before. The fruits of carelessness are sorrow, loss of time and smaller pay."

Look behind before turning and pulling from curb.

Slow down at street crossings to 10 miles per hour.

Slow down when approaching schools.

Be sure you know the parking rules before parking.



Help Cut Down the 1923 Toll

In spite of all the efforts to inculcate Safety rules, more than 14,000 persons were killed last year throughout the United States in auto accidents. This was a death rate of 12.9 per 100,000 population and an increase of 12 per cent or about 1,600 deaths over the 1921 total.

It is folly for reckless drivers to endanger their lives and the lives of their passengers, and it is murder when they kill others. The season for death under the wheels of the automobiles is never closed, but summer may be called the open season for casualties because of the added number of cars on the road. Go along any of the better country roads leading into our larger cities on Monday morning and see the result of the reckless driving of the night before. You will find collisions at railroad crossings, with sometimes an entire family wiped out. Cars are pitched over embankments at dangerous curves through careless driving—the passengers in hospitals. In all localities it is the same. Nearly all of the accidents were preventable by the exercise of due caution. Many could

have been avoided by heeding traffic regulations. The greater number of cases are those victims of wanton speeding and insensate joy-riding.

In most cities when an over-ambitious driver steps on the gas he is apt to find himself before a police judge who acts without compassion when it comes to dealing with speeders. Many of these judges are showing these offenders the error of their ways by handing out stiff sentences. Judges in the city of Philadelphia show no disposition to deal leniently with them. One driver who ran into a group of people waiting for a trolley car and injured several persons earned for himself a term of from four to eight years in prison for his carelessness. Another, a wealthy banker and clubman, who had run into and killed three persons as they were alighting from a street car, was given from 6 to 10 years in a penitentiary. This man was hopelessly intoxicated. If there were more instances of punishment such as that meted out in Philadelphia, the effect would be salutary.

Gleaned From Here and There in the Ford World

Tractor Sees Service in Extreme Northern Regions

Theatrical Group Uses Ford Truck; Approach Customs of Ancient Troubadours

Elmer, New Jersey—Twelve telephone poles to a load, twelve miles over sand roads, is the task allotted to this Ford truck. Four months ago this work was being done by a heavy



truck but the cost of upkeep made a change imperative. During the four months that the Ford truck has been in operation the owner has spent but five dollars for repairs.

Rigby, Idaho—The Fordson demonstration held by the Jefferson Auto Company of Rigby, Idaho, on the farm of Mr. Miller near that place proved with certainty the superior quality of the Fordson tractor.

The land to be plowed was covered for the most part with willows and briar bushes, from two to five feet in height. Despite the many difficulties encountered four acres of this land was turned over in a day.

Previous to this demonstration Mr. Miller paid \$32 per acre to have this land cleared. This did not include plowing. With the aid of the Fordson the cost run about \$2 per acre, a saving of \$30 an acre. Handling twenty acres of this land in this manner Mr. Miller expects to save enough to pay for the entire outfit consisting of Fordson and plows. His only regret was that he had not seen a Fordson demonstrated before.

Count 'em, and you'll find there are eight Fords and Fordsons in the accompanying photograph. The machines, all of them, belong to the Shedden family of Troy, Pennsylvania. From appearances, the Sheddens bid fair to "corner" the market on Ford products, and probably hold a record for quantity ownership of one make of machine.



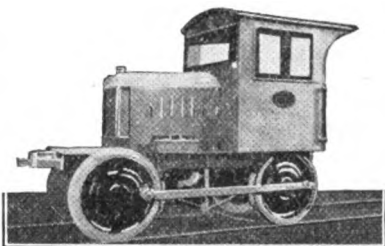
Seattle, Washington—A special Fordson tractor left here recently for service in the arctic regions of Alaska. Miles beyond the arctic circle in the land of eternal ice and snow this tractor will haul coal and provisions to the St. Thomas Episcopal Mission at Point Hope and will undoubtedly be farther north than any other piece of automotive equipment outdistancing even those that are in use in Iceland at the present time.

Reports have come from numerous points telling of the successful use of the Fordson tractors for locomotive power on railroads.

The accompanying picture shows a new "locomotive" on a Chilean railroad. Before the flanged wheels, cab, couplers and other additions were made, it was a Fordson which thought it was going to see service plowing the fields of some farm.

This car is rapid and economical in operation, and easily handled in emergencies.

New York City, New York—A theatrical company has been organized here to be known as the jitney



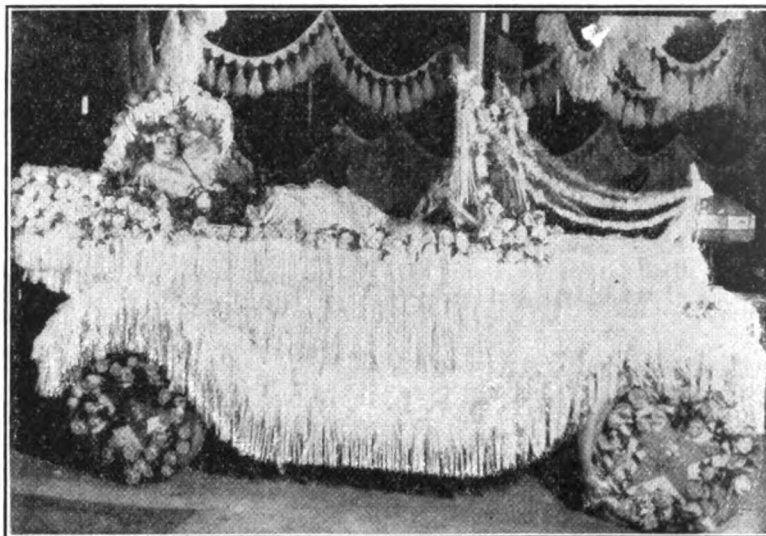
players. They will tour the New England States in a Ford truck upon which will be mounted their stage. This will inaugurate a new movement in the American theater approaching the customs of the ancient troubadours. A special stage was designed 14 feet broad and 16 feet deep. In addition to this the truck carries all modern stage equipment as well as a complete lighting system. That a Ford was chosen to promote this enterprise speaks for itself.

San Francisco, California—J. W. Allen, and his Ford car, known as "Old 1913," hove in town yesterday heading for the mountains where he expects to be the first of the season to cross the summit through Yuba

Pass. Mr. Allen, who is 81 years of age, has driven his car 150,000 miles, and takes special pride in proclaiming that the cylinders have never been rebored.

Ford Products Appear in Gala Attire; Win Prizes

Dealers Take Advantage of Exceptional Chance to Advertise



Winner of two first prizes.

Hail to the victors!

We have with us today a motor car and a tractor (if you want to know what kind they are, you'll have to guess) which took a day off from their regular work and enjoyed a little diversion by parading, incidentally winning the first prizes in all the events in which they participated.

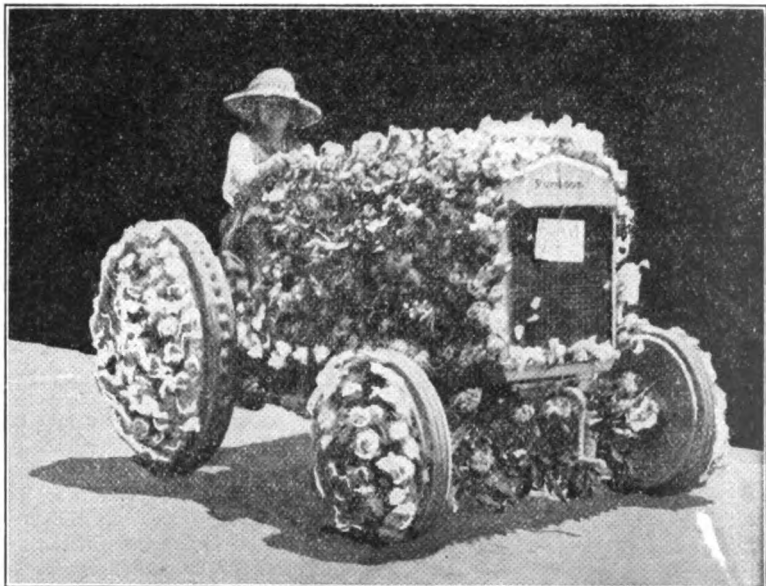
The attractively decorated conveyance exhibited above was executed by J. K. Hollowell and Company, Ford Dealers in Dublin, Georgia. After the judges at the Dublin Auto Show selected it as the "most beautiful car," the Hollowell Company again entered it at the Fort Valley Peach Festival. Here, too, it won first honors.

Too bad there weren't other contests around the vicinity in which the

lucky car could have been exhibited. There are a lot of interesting things that can be done with blue ribbons if one has enough of them.

The other photograph shows what was once a tractor before the camouflage was added. This is the entry which won first prize in the Industrial Section of the Luther Burbank Rose Carnival parade in Santa Rosa, California. On first glance the gaily bedecked machine looks as if it had just gone through a flower shower. Our only regret is that the photograph didn't catch a touch of the fragrance, too.

These prize-winners, coming from different sections of the country, well deserve the awards they received, and might be remembered to good advantage for other events of this nature.



Winner of first prize in Luther Burbank rose carnival.

WWI Programs

Concluded from page 5

it a realistic "way down south" finish. Mrs. Flora Dominy played the piano accompaniment. Miss Knowlton also kept her WWI hearers laughing with a number of readings including "Judy O'Shea see Hamlet" and "When Paul Pints His Pistle at de Ephesians."

The lecture of the evening by Dr. R. V. Durham, Department of Medicine, Henry Ford Hospital, was the seventieth Health Talk to be broadcast from Station WWI. Dr. Durham's subject was "The Psychology of Illness—Hospitalization," and brought attention to the newer meaning that the term hospital has taken on as well as the ever-increasing importance of modern hospitalization.

Future Programs Station WWI

August 8, 1923.

Commencing at 8 p. m.

Wave Length 273 meters.

Orchestra Selections—*Minuet Royal*: by Pressard, *Andante*, Marie; *Journey's End*, Fox Trot, Tierny; by Orchestra from Ford Motor Company Band. Tenor Solo—*O Sleep, Why Dost Thou Leave Me*, Handel; by Sidney Johns. Contralto Solo—*One Fleeting Hour*, Dorothy Lee; by Edna Reicks Dawe, accompanied by Mrs. Henry Hosmer. Readings—*Music in the Bush*, Robert Service; *When Malindy Sings*, Dunbar; by H. B. Elliott.

Orchestra Selections—*Apple Sauce*, Freed; *Good Night*, Conrad; by Orchestra from Ford Motor Company Band. Tenor Solos—*O Flower of All the World*, Finden; by Sidney Johns.

Contralto Solos—*The Morning Is Calling*, Terry; *The Prayer Perfect*, Stenson; by Edna Reicks Dawe, accompanied by Mrs. Henry Hosmer.

Readings—*Playing Tinkertown*, Edmond Vance Cook; *To Be Near Her*, Ben King; by H. B. Elliott. Tenor Solos—*Your Eyes*, Schneider; *Go Down Moses*, Burling; by Sidney Johns.

Contralto Solos—*The World Is Waiting for the Sunrise*; *My Task*, Ashford; by Edna Reicks Dawe, accompanied by Mrs. Henry Hosmer.

Orchestra Selections—*March Siamese*, Lincke; *Selected*; *My Sweetie Went Away*, Handman; by Orchestra from Ford Motor Company Band.

August 15, 1923.

Commencing at 8 p. m.

Wave Length 273 meters.

Orchestra Selections—*The Babbling Brook*; *You Tell Her I Stutter*; by Fox Brothers Orchestra.

Soprano Solos—*Gray Days*, Noel Johnson; *April*, Densmore; by Lois Duford, accompanied by Mrs. William J. Stein.

Tenor Solos—*Smile Through Your Tears*, Hamblen; *Come to the Fair*, Martin; by Truman Holt, accompanied by Mrs. Alice MacCord.

Violin Solo—*Serenade*, Braga; by David Park, accompanied by Mrs. William J. Stein.

Soprano Solo—*Pale Moon*, Frederick Knight Logan; by Lois Duford, accompanied by Mrs. William J. Stein.

Reading—*Dutch Monologue*; by Mrs. Alice MacCord.

Orchestra Selections—*Sunshine Comes After Rain*; *Swinging Down the Lane*; by Fox Brothers Orchestra.

Vocal Duets—*The Land Where the Good Songs Go*; *Smilin' Through*; by Mrs. Alice MacCord, contralto, and Truman Holt, tenor.

Violin Solos—*Souvenir*, Drda; *Ave Maria*, Schubert; by David Park, accompanied by Mrs. William J. Stein.

Soprano Solos—*Happy Sing*, Teresa Del Riego; *Selected*; by Lois Duford, accompanied by Mrs. William J. Stein. Orchestra Selections—*Holding Hands*; *Louisville Low*; *Yes We Have No Bananas*; by Fox Brothers Orchestra.

August 22, 1923.

Commencing at 8 p. m.

Wave length 273 meters.

Orchestra Selections—*Barney Google*—Fox Trot; *Dreamy Melody*—Waltz; by "Serenading Six" Orchestra.

Soprano Solos—*Pale Moon*, Frederic Knight Logan; *Ciribiribin*, A. Pestalozza; by Miss Mary Helen Holmes, accompanied by Miss Elizabeth Moore at the piano.

Vocal Solo—*Sunrise and You*; by Mr. Roland Baker.

Health Talk No. 73—*Infantile Paralysis*; by Dr. C. W. Peabody, Surgical Department, Henry Ford Hospital.

Steel Guitar Solo—*The Rosary*; by Leon Weetzer, accompanied by Edgar Peters at the piano.

Soprano Solo—*The Morning Wind*, Gena Branscombe; by Miss Mary Helen Holmes, accompanied by Miss Elizabeth Moore at the piano.

Vocal Solos—*Little Grey Home in the West*; *Mighty Lak A Rose*; by Mr. Roland Baker.

Orchestra Selections—*Yes, We Have No Bananas*; *Ten-Ten-Tennessee*; by "Serenading Six" Orchestra.

Soprano Solos—*Just You, Con Barth*; *Ave Maria* (Cavalleria Rusticana), P. Mascagni; by Mary Helen Holmes, accompanied by Miss Elizabeth Moore at the piano.

Banjo Solo—*Selected*; by Mr. Leon Weetzer, accompanied by Mr. Edgar Peters at the piano.

Vocal Solos—*Isle O Dreams*; *Absent*; by Mr. Roland Baker.

Orchestra Selections—*Desmona*—Fox Trot; *Three O'clock in the Morning*—Waltz; by "Serenading Six" Orchestra.

Advertise Purchase Plan

Concluded from page 5

show space have preferred to use real Ford automobiles instead of the models for their displays. This scheme is equally effective. The Callahan-Krause Motor Company, Chicago Dealers, followed such a style, placing a shining new Ford touring model in a setting portraying a beautiful country scene. Anyone who was contemplating the purchase of a machine would have been irresistibly influenced after viewing such an appealing scene as was produced in this case.

Mention cannot be made here of all the displays which the thousands of Ford Dealers have arranged; but, nevertheless, the fact remains that a good window is a good business-getter, and gives ample return for the small amount of effort expended. Among the crowds no one is able to tell who is a prospect for a car, and, since it is out of the question to keep a man out front to talk all day, the next best thing to do is to create a silent salesman—a properly dressed window.

Tractors in Japan

The Japanese Government has purchased three Fordson tractors for use in plowing at the Experimental Station at Dainansho, Formosa. The Formosa people state that the tractors are giving entire satisfaction and in the event of future purchases being made they feel sure the government will again purchase Fordsons.

Fordson Proves Utility in Oil Field

Use of Tractor by Oil Driller Results in Saving Business

The following unsolicited testimonial from the owner of a Fordson tractor, C. L. Brown, of the Mexia Torpedo Co., Mexia, Texas, is worthy of thoughtful consideration. In view of the fact that the owner of the tractor has devoted many years to working in the oil fields his endorsement of the Fordson carries all the more weight.

"I consider the Fordson the most wonderful and powerful machine for its size that has yet been invented. In my line of work, pulling casing from abandoned oil wells, the Fordson takes the place of a 12x12 steam engine carrying 150 pounds of steam and saves the cost of transportation of such machinery from place to place.

"With my Fordson I pull casing, move machinery, pull derricks into place, pump mud for plugging purposes and set off shots of glycerin with which I shoot casing, as successfully as a steam generator or electric battery would do.

"I am deeply grateful to Mr. McElroy, the salesman, and Mr. Welch, of the Welch Motor Company, authorized Ford agents in Mexia, for extending me the opportunity of securing this wonderful machine. I had gone broke trying to pull casing with a gasoline engine. I frankly told them that I could not pay a cent on the Fordson but their confidence in the machine was so strong and their demonstration so complete that they permitted me to use the Fordson on trial under a guaranty so I went to work with a renewed determination to succeed, quickly paid out the Fordson and am making money every day, all because two men believed in the Fordson tractor."

This testimonial is the voluntary contribution of a satisfied business man, who has been able to change a losing venture into a paying one by means of the Fordson tractor. There are no doubt many drillers in the oil fields of this country who would gladly discard their present expensive ineffective equipment for the more economical efficient Fordson.

The total amount of land repeatedly burned over, chiefly before the creation of the national forests, which can be restored to productivity only by planting, is estimated to be at least 1,500,000 acres, according to the Forest Service, United States Department of Agriculture. Because of the lack of available funds only a small amount of planting has been possible so far. At the rate at which work is now being conducted it will require between 150 and 200 years to reforest these denuded areas.

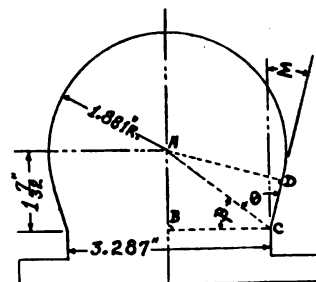
Problems

If there are explanations or comments regarding problems, write the Henry Ford Trade School, Ford Motor Company, Detroit, Michigan.

Solution to last issue's problem:

No. 64

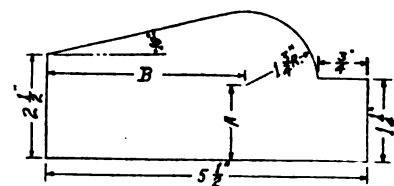
The following drawing has been purposely distorted to bring out details.



DETERMINE ANGLE E .
 $AB = 1.21675$ $BC = 1.6435$
 $TAN. P = AB \div BC = 74.55 \text{ OR } 36.53 22'$
 $AC = BC(\sec. P) = 2.046$
 $SINE \theta = AD \div AC = 91.35 \text{ OR } 66.49 54'$
 $ANGLE E = P + \theta - 90 = 13 23 16''$

Try This

No. 65



DETERMINE A AND B.

Fordson Aids in Rescue of Pony

Bicknell, Indiana—Rex, a Shetland pony entombed in the cave-in of North Side Mine, was rescued after being entombed for ten days, or a total of 252 hours. Rain, mine gases, and other complications retarded rescue work for a week; but, confident that the pony still lived, the workers, attaching a Fordson to a silo-filler, finally sent a hurricane of air down the main shaft and started ventilation again out their air-hole. Excavating and bracing the shafting then continued until diggers reached the animal, which was found alive. Upon signal, the hoisting engine pulled out its cable, the mud-covered rescuers first coming into view, and following them, suspended from the end of the rope, the 700-pound Rex, who convinced the skeptical that he was still alive by some hearty lunges.

Being a thoroughbred doesn't depend upon your ancestors, but upon you.

Ford News

Volume III.

F

Dearborn, Mich., August 22, 1923

No. 2

"Salon Petite" Distinctive Show

Exclusive Exhibit of the Lincoln Types a Success

Arranged through the auspices of the Cincinnati Branch and Dealers of the Ford Motor Company, the recent Lincoln Salon Petite was made the occasion of a formal presentation of the complete line of Lincoln motor cars to residents of that city.

The setting for the Salon was the Louis XIII ballroom of the Hotel Sinton, where the different Lincoln body types, resplendent in various colors blended, entered harmoniously into a picture of exquisite appointments, floral decorations and fountains, further enhanced through artistic lighting effects.

Supplementing this, the most cordial and courteous attention was accorded those in attendance. Two small pages, charmingly costumed, presented roses to ladies as they entered, and displayed a polite deference to the gentlemen. Doormen, chauffeurs and other attendants were

Concluded on page 4

Employees Enter Prize Contest

\$100 Cash Award Creates Interest; Many Articles Already in; Contest Closes Sept. 1

Have you entered the contest to win the \$100 prize offered by "FORD NEWS" for the best descriptive article on the Ford Foundry at the Rouge Plant?

If you could use \$100 in addition to your regular pay check, get busy with paper and pencil when you get home tonight and write what you know about the foundry and the work that is done there.

Already we have received many articles and considerable interest and enthusiasm is being shown. A few hours' work will win this \$100. Do you know of any easier way to earn such a sum?

Remember the rules:

The prize-winning article will be published in Ford News and must not contain more than 500 words.

Typewritten copy is preferred.

Use only one side of the sheet.

Write name and address plainly; give badge number.

Address all manuscripts to Ford News, Dearborn, Michigan.

This contest will close September 1, 1923.

Ford World News Flashes

*Fordson Supplants Horses; 99-
Year-Old Texan Buys
Ford Car*

Oklahoma City, Oklahoma—During the recent floods throughout this and adjacent states, in which roads and bridges were washed out, the first transportation available was a Ford touring car equipped with flanged wheels, used on railway lines by authorities to survey the high-water damage. This machine rendered invaluable assistance in the quick restoration of railroad activities.

Havana, Cuba—*El Mundo*, a local newspaper, has equipped a Ford touring car with a radio receiving and transmitting outfit, to be used in bringing programs from stations far and near to audiences gathered in the city's public parks.

Peking, China—Chinese funerals are occasions for great celebrations,

July Production Exceeds All Preceding Months

ceremony being carried on through thirty-five days of feasting and worship. It is the custom to send to the "spirit world" whatever the deceased enjoyed during his earthly life, or whatever his family thinks he would enjoy having in the next existence. This is accomplished by constructing a paper model of the particular object of interest and burning it during a procession preceding the burial. In several instances selection has fallen to the Ford car.

Nottingham, England—The old barge horse has at last found a serious rival in these days of industrial revolution, since Fordson tractors have been successfully employed to tow gravel barges with loads weighing eighty tons through the placid waters of the Trent. The distance is about three miles, and the tractor, working from the towpath, required only fifty-five minutes to complete the trip, including several stops. The new method is a vast

Concluded on page 5

Single Day's Output Over 7,000 Cars and Trucks

Ever-Increasing Production Fails to Satisfy Unequal Demand for Ford Products

Past weekly production records were again shattered when the figures covering the week ending August 7 were reported. The domestic output for the week totaled 41,491 cars and trucks, an increase of 293 over the previous week. There were also 2,041 Fordsons turned out in the same week and the Lincoln Division produced 203 motor cars of all types. In the week ending July 31, the domestic output totaled 41,198 Ford cars and trucks. Daily production during that period was almost a constant succession of new records. Friday, July 27, started it with 6,907; Monday came along with 7,009 and

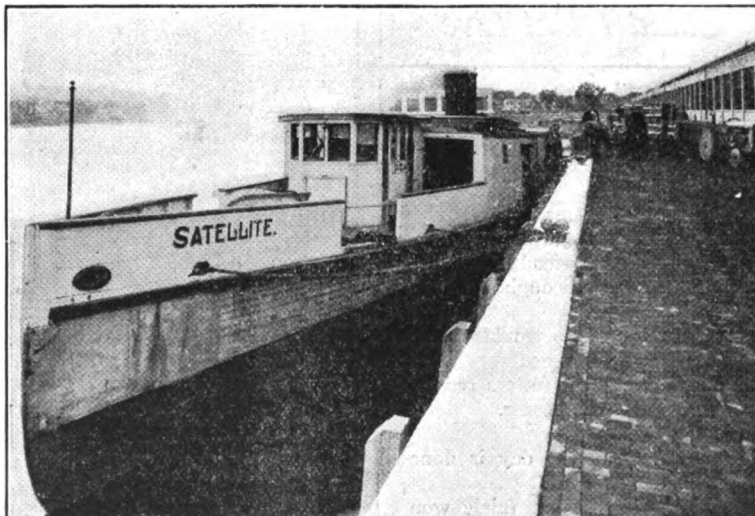
Water Transportation Speeds Shipments at Green Island

Three-fourths of the earth's surface is covered with water. The waters of the earth in the main are navigable, but where not navigable much has been done to make them so. Extensive systems of intersecting canals have been constructed and these in addition to the natural

waterways of America make for cheaper transportation resulting in a reasonable price for the product transported.

The Hudson River is navigable by steam vessels 150 miles to the city of Troy, and by canal barges to Waterford. Conditions

Concluded on page 4



Loading river steamer at Green Island.

Numerous telegrams have been received from employees advising that they cannot report for duty until a certain date, and, since the only signature is the writer's name, considerable confusion is experienced in delivering these messages to the proper departments, due to the fact that there are a large number of persons employed by the Ford Motor Company whose names and initials are identical. Thus it is imperative that badge numbers and departments be included with signatures, as follows: "Frank B. Smith, D-1426, N-52."

Tuesday ended the week with an output of 7,121 cars and trucks.

The production schedule for August calls for 183,735 cars and trucks—a higher figure than any previous month in the Company's history. New records may be expected during the coming weeks for the problem of production apparently continues to be the only factor limiting the sales of Ford products and every effort is being made to overcome this condition.

The month of July saw two new records established. In addition to establishing a new high record for retail deliveries, July also carried the sales figures for the year past the million mark.

Digitized by Google

Concluded on page 8

Ford News

ESTABLISHED 1920

Issued for the employes of the
various Ford Interests.

VOL. III, No. 2

August 22, 1923

PUBLISHED SEMI-MONTHLY

Motto

If the people really set their minds on anything it is impossible to prevent their getting what they want. But even with that true, it is necessary that the people shall know what they want. It is doubtful that a change for the better can come through a political election. It is a serious question how far our problems are politically solvable. But one thing is certain—rosy promises will not be accepted by the people now, regardless of who the man may be that makes them. Nobody knows what is going to happen, nobody knows how to try to make anything happen; and until a clear idea evolve in the public mind it is useless to try to forecast the future. One thing you might ponder: There are a number of things to be done in the United States that have no connection with elections.

—Henry Ford.

Friction

In the world of mechanics, improvements are constantly being made to bring machines nearer perfection. Let us consider for a moment the matter of friction. In practically all industrial establishments that use machinery, everything is being done to eliminate unnecessary mechanical friction. The bearings are run in baths of oil, without noise and with comparatively little wear.

How about human friction? Curiously enough, this element is given little consideration in industry, with the consequence that one of the most destructive elements in plant efficiency is permitted to run its riotous course, too often leaving in its wake endless waste and ruined human lives.

The best lubricant for human friction is fellow-feeling. If we put ourselves in the other fellow's place, and try to get his view of things, much of the irritation and impatience that breed friction and misunderstanding will give place to understanding and patient co-operation. Our own views will in this way inevitably broaden and become modified, an adjustment will take place, and the tension will be relieved.

A moment's reflection on this subject will reveal that most friction is the result of self-centered interest. By giving first consideration to the accomplishment of the task by working in harmony with those about us,

a new spirit will be born in industry which will be found to be a splendid lubricant in our all-important relations with our fellow-men. And, as a result, we shall have added unto ourselves that priceless gem, personality.

Dearly Bought Advice

Advice may be cheap but if it comes as the fruit of experience it is often most costly. The following advice cost a man a long term in jail for embezzlement. He was an officer in a savings bank of an exclusive district, a highly respected man who succumbed to the desire to "keep up with the Joneses."

This epigram was carried in his pocketbook: "Always pay as you go, but if you can't pay, don't go." He remarks bitterly that his whole trouble resulted from not living up to this motto.

The following is quoted from that man:

"I feel I have a right to give this admonition, because my advice is not cheap. It cost me my honor, and a good reputation.

"The desire to keep up with the crowd . . . is the curse of our age, and one thing which more than anything is ruining the character of our men and women, the acid which is corroding our national life . . . The word "exclusive" strikes a responsive chord in any selfish heart . . .

"Keeping up with the Joneses"—that is the cancer that is destroying the souls and reputations of men. The Joneses may have established their stake by plugging along in the beginning, earning their right to spend . . .

"It takes tremendous will power to do that. When it is too late you find that you can't save and make a splurge at the same time. The most important word in the English language is "No." I know now that it does not matter what a man appears to be. It is what he is that counts. It is one thing to know right, quite another thing to live it. Don't try to fool God, or your own conscience. It can't be done.

"Don't let the dollar sign take the place of character."

Could I But Live

Could I but live, that every day
Was one of calm content
Could I but know and truly say
This is a day well spent.

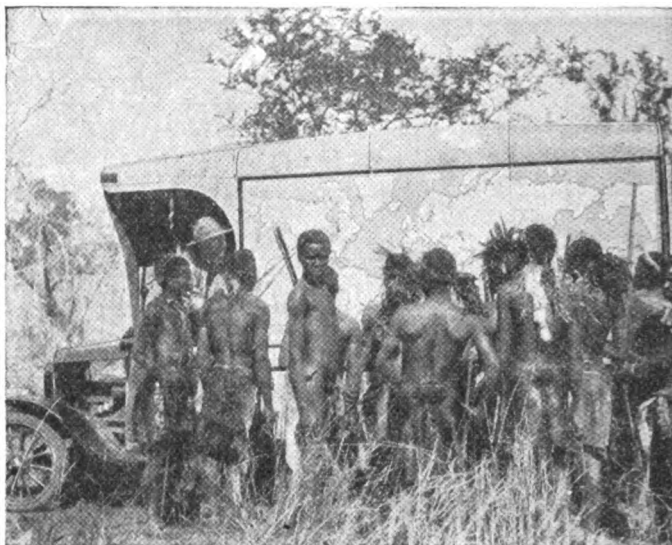
Could I but do some kindly deed
Nor think me homage due
Could I but be a friend in need
Until the need be through.

Could I but to some troubled friend
A feeling give of peace
Could I but clinging fetters rend
To give some soul release.

Then could I say the day is done
And seek me quiet rest
Nor think my rest but fairly won
I tried to do my best.

—J. A. Macdonald.

Heart of Darkest Continent Penetrated by Ford Cars



Natives came from all directions to see the "self-moving" vehicles. This truck embodied sleeping accommodations and photographic "dark-room."

Motion-picture enthusiasts to a number well into the thousands have witnessed showings of the nationally known film, "Hunting Big Game in Africa," and have thrilled to its many exciting scenes.

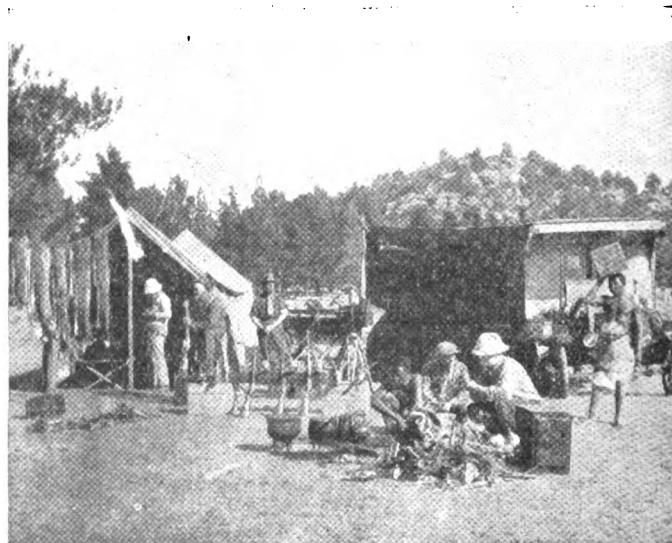
While the cinema screen has revealed many of the wonderful experiences of the scientist-adventurers who took the pictures, there are many other interesting features to the full story which the film itself does not include. One of these is the part played by two Ford cars, without which the undertaking probably would have been unsuccessful.

When the Oakland Museum Expedition started on its trip into the interior of Africa, to gather specimens of animal life and take motion pictures, the

original plan was to use ox teams for transportation into the jungles; but the party had not progressed far in this direction when the havoc of the deadly tsetse fly upon the oxen, killing them one by one, forced the caravan to turn back.

For a time it looked as though the venture were doomed to failure, until Mr. H. A. Snow, head of the undertaking, upon the advice of his cameraman, Mr. F. S. Wilton, decided to substitute Ford cars for oxen. Two Ford machines were purchased, a touring car and a truck, at a cost approximately four times the price in the United States. The truck was equipped with a special body designed by Mr. Snow to serve as a sleeping

Concluded on page 7



The encampments of the Oakland Museum Expedition to Africa became the mecca for hordes of natives who had never seen an automobile.

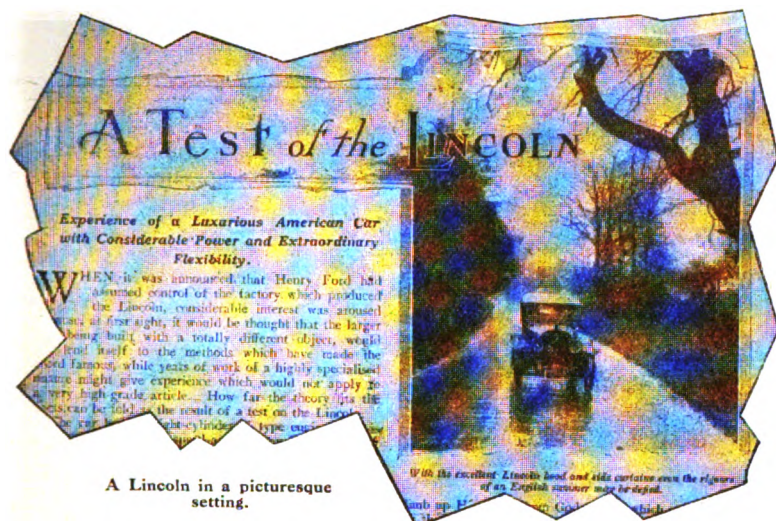
Leading English Automotive Journal Lauds Lincoln Car

Result of Road Test Determines Excellence as Hill Climber

The June 22 issue of *The Auto-car*, one of the leading English automotive publications, carried a two-page article on the Lincoln car. A portion of that article is quoted below:

When it was announced that Henry Ford had assumed control of the factory which produced the Lincoln, considerable interest was aroused because, at first sight, it

ford, avoiding other traffic as requisite, and yet with power in hand, and find no necessity to change gear. Exactly the same holds good on Kingston Hill or Robin Hood Hill. Not only can the car go up fast, but, what is more important, it can go up quite slowly on the same gear; in fact, on one particular hill this is the only car of the many that we have tested which took the mile-



A Lincoln in a picturesque setting.

would be thought that the larger car, being built with a totally different object, would not lend itself to the methods which have made the Ford famous, while years of work of a highly specialized nature might give experience which would not apply to a very high-grade article. How far the theory fits the facts can be told as the result of a test on the Lincoln.

The car has an eight-cylinder V type engine, and particularly has it been designed so that all ordinary work may be undertaken comfortably on top gear. In the course of a 128-mile run from London round Hindhead and back through Surrey, it was necessary to use second gear on only two hills, both of about 1 in 7 gradient, and this notwithstanding that second would have been used freely on other occasions had second been necessary.

It is with large engines of this type that one approaches very near to the ideal of motoring movement, because a steady, but slight, movement of the throttle lever produces a feeling that the car is bounding forward without any effort on the part of the engine. This is particularly noticeable on long steady ascents, as, for example, the climb up Hindhead from Godalming, which can be taken for the whole way on top without the least trouble, and does not need full throttle to do it. Even more surprising is it to find that at 10 to 15 m. p. h. it is possible to run smoothly up the steep High street in Guild-

ford, avoiding other traffic as requisite, and yet with power in hand, and find no necessity to change gear. Exactly the same holds good on Kingston Hill or Robin Hood Hill. Not only can the car go up fast, but, what is more important, it can go up quite slowly on the same gear; in fact, on one particular hill this is the only car of the many that we have tested which took the mile-

long run entirely—and easily—on top. Thanks to a particularly smooth clutch it is possible to start off on top gear, and the whole machine runs almost silently. In actual test, without driving especially for petrol consumption and at a round cruising speed, the Lincoln covered 13.1 m. p. g.—better even than its claim—and we are informed that the oil consumption is remarkably low. The carburetor has an electric heater, brought into operation by the air shutter control, to assist in starting the engine on a cold day.

Being American, the body is full of little gadgets for the delectation of the occupants. For instance, there are two doors to the driving compartment, and to clear the space still further the steering wheel can be folded up out of the way. One key fits the ignition switch, without which the starting motor will not come into operation—an important point. The flap to the tool kit pocket in the left-hand side door, the locks on two excellent cupboards behind the front seats, the lock for the gear lever in neutral, and the lock which secures the spare rims in position at the rear of the car, are all useful. An electric cigaret lighter is very convenient, more particularly because its flex allows it to be handed to the rear passengers. An inspection lamp with a long length of flex can be switched into the circuit from a plug on the instrument board. Another electric lamp is between the cupboards behind

the front seats, and is automatically switched on when the side doors for the rear seats are opened. Above the instrument board is a light which is also a telltale for the tail lamp. The oil gauge needle, the petrol tank contents dial needle, and the head of the oil level indicator on the engine crank case are all luminous at night.

For night driving the head lamp reflectors can be tilted by means of a lever on the steering column.

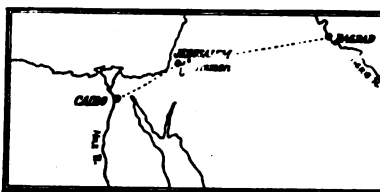
From this it will be seen that the details of the car are remarkably well carried out, but apart from these refinements the Lincoln is a good car, well worth the price asked. It is an intriguing example of what America produces in the way of a big, comfortable, smooth-running, top-gear car.

Fordson Plows Route For Flyers

Cairo-Bagdad Air Mail Follows Trail of Tractor

Jerusalem, Palestine—A two-furrow track tracing the Air Mail Line for the guidance of aviators has been plowed between Cairo and Bagdad as indicated on the accompanying map. This work was divided between three Ford agents along the route, the East Company in Cairo and Palestine, and the Cotterell and Greig Company in Bagdad.

The Jerusalem division, using a Fordson tractor, plowed from Amman in an easterly direction to a station half way to Bagdad, or approximately 270 miles. The actual working time was 174 hours, or 17



Dotted line shows air mail route traced by Fordson.

working days. Practically no mechanical trouble was experienced, although the rough stretch of lava beds proved hard on the plowshares, ten of these being required before the work was completed. Supplies were brought by airplane from Amman.

The other two agencies covered the remainder of the distance, completing about 850 miles between the two ends of the route.

A bronze marker was put up on the side of a building on Second street in Sacramento, California, recently, carrying this legend: "Site of Terminal of Pony Express, 1860-1861. Marked by Daughters of the American Revolution, Sacramento and San Francisco Bay Chapters, 1923."

An experienced chauffeur in China receives between \$12 and \$15 a month.

Horses on Farm Replaced by Tractor

Useless Non-productive Effort Eliminated by Fordson

"Just how many economic advantages has the Fordson over the horse?" is a question that is often asked. Owners of the "iron horse" gave the following as a few of the many reasons why they have the advantage over their neighbors who stick to their horses.

Grooming eight horses once a day at 15 minutes a horse takes two hours, watering and feeding another hour, harnessing and unharnessing, hitching up and unhitching, leading from barn to implement, and so on,

Employees of the Ford Motor Company are advised that the rule concerning badges is inviolable—these must be shown by workmen to get into the buildings. The addition of many new employees, who have not realized the importance of this point, has caused numerous misunderstandings. Also, if a man is to be away from work, leave of absence is necessary. Notification by telephone is good for one day. Reinstatement is necessary after five days' leave without notice.

takes another hour. Here we have four hours' work that has brought practically nothing productive.

A Fordson can be filled with water, fuel and oil and thoroughly gone over in half an hour.

A Fordson can be worked continuously day and night through all the seasons of plowing, seeding and harvesting.

Horses cannot be humanely worked more than eight hours in the heavier operations and 10 in the lighter.

Tractors are not troubled with flies, heat or overwork. Horses suffer terribly and die in appalling numbers when overworked during hot weather.

A Fordson can do all a horse can do and belt work besides.

It takes but a few hours to make a Fordson tractor. It takes three years' time and three years' care (some horsemen say five years) to make a work horse. At any time in those three years the colt may die and be a total loss.

A Fordson eats only when it is engaged in productive work.

Horses eat 365 days of the year. A Fordson makes every acre of the farm a source of profit.

An "eight-horse-farm" withdraws 40 acres from the farm's return to feed itself.

Which is the more profitable, Fordson or horse-flesh?

WWI Programs Continue to Delight Audiences

Wide Variety of Talent Wins Unqualified Approval

Talks on Medical Treatment of Disease Keenly Enjoyed; Many Requests for Printed Copies

Swept into the arena of radio performances on the evening of July 25 by the lively selection, "The Derivishes," played by the River Rouge Orchestra, the WWI program steadily unfolded its treasures to the listeners-in. During the evening, the orchestra also played a number of other selections, both popular and classical, with much spirit.

Accompanied by Miss Irene Doe, Mr. Victor Shevlin entertained our unseen audience with several well-liked songs, among them "Rosemary for Remembrance" and "Irish Love Song."

Miss Laura Johnson, in her delightful soprano solos, added much

to the enjoyment of the program. She was accompanied by Mrs. Arthur Sylvester at the piano.

"The Present Status of the Medical Treatment of Disease—Treatments," was the subject of the enlightening health talk given by Dr. Sladen. "Present" is significant in the title of this talk, for, as Dr.



Miss Laura Johnson

Sladen so clearly points out, today our attitude toward the treatment of disease has changed radically from older medical views. This talk will well repay reading. A copy may be had by requesting Health Talk No. 71 from the Ford Broadcasting

Station, Dearborn, Michigan.

Perhaps no music is more appreciated on these warm summer evenings than that of the Hawaiians. On the evening of August 1, the Ford Hawaiians gave much enjoyment to the WWI listeners-in by their delightful music, both vocal and instrumental. As usual, this music was of widely varied character, and the spirit with which it was rendered accentuated its charm.

The tenor solos of Mr. George Thorpe were most pleasing and had a distinct place in the evening's program. Mr. Thorpe was accompanied by Miss Dorothy Stanley at the piano.

Mrs. Jack George's clear soprano voice was much enjoyed in the solos on this program, particularly the spirited lyric, "Carmena." Her piano accompaniments were played by Mrs. Harry Gee.

Again our listeners-in were favored by several piano solos from the masters, played by Mr. Demetrius M. Radovanovitch, which were a real musical treat.

Mrs. Arthur Sylvester

Dr. Sladen's talk on "The Present Status of the Medical Treatment of Disease—Medicine," was most timely and illuminating to the average person who knows little of medicines. Much learning is reduced to simple terms in this talk, which may be read with benefit by any person at all interested in medicine. This is Health Talk No. 72, and will be mailed to any person requesting it from the Ford Broadcasting Station, Dearborn, Michigan.



Miss Dorothy Stanley

That all might be pleased, the Ford Motor Company Band opened the WWI program of August 8 by both a foxtrot and a waltz. In the course of the evening, they entertained with a number of popular jazz selections.

This program was enriched by several happily chosen tenor selections, delightfully sung by Mr. Sidney Johns, accompanied by Mr. W. H. Bawden at the piano. These proved most enjoyable and were heartily appreciated by those who listened in on this evening.

Always eagerly looked forward to, listeners-in were again afforded the pleasure of hearing Mrs. Edna Riecks Dave in several truly beautiful contralto solos, the beauty of which was fully brought out by the richness of Mrs. Dawe's voice and the expression with which she sang. Mrs. Dawe

Concluded on page 8

Twenty Years a Ford Dealer

Pioneer Pacific Coast Agency Observes Anniversary

San Francisco, California—In conjunction with their twentieth anniversary celebration commemorating their twentieth year as Ford Dealers the William L. Hughson Company held an Old-Timers' Day. Prizes were offered for the oldest cars, the oldest cars with the best appearance and running condition turning out for the review. Leading the parade was the old 1903 Model B Ford.

A program of motion pictures showing the making of Ford Products and their use was given, and to close the celebration a big reception and dance was held in the main showroom.

An anniversary folder telling briefly the history of William L. Hughson, pioneer Pacific Coast Dealer, was put out to all customers and proved to be a big business producer in the way of getting prospects from these boosters of the company.

The William L. Hughson Company has been in continuous operation since January, 1903, and although the name of the company has been changed several times during the 20 years, the personnel of the ownership and management has been the same during the entire period.

Green Island Shipments

(Concluded from page 1)

are ideal for shipping by water from the Ford Motor Plant at Green Island, New York. The island is located at Troy near the confluence of the Hudson and the Mohawk rivers. In shipping by all-water route from this Plant to the Company's Plant at Kearney, New Jersey, there are many advantages to be had over the rail route. It takes only about 14 hours to make the trip by boat, while by rail the time consumed is from four to five days. Much less time is required to load radiators or merchandise on the boat than is required to load the same in freight cars. The rate by water is but 23 cents, while by rail it is 28½ cents. The freight boats dock at the Ford Motor Company dock, where the water is 17 feet deep and proceed direct to the dock at Kearney. The Hudson River Freight Line, which is utilized for shipments, is the only all-freight line operating on the Hudson River, the other line being a freight and passenger line.

The return to normal industrial life is awakening an ever-increasing demand for greater facilities for transportation. The development of the waterways of the United States will furnish the cheaper, and, in many instances, safer means of transportation that the country demands.

The will to work and the spirit to save produce the prosperous citizen.—The A. W. Booster.

The Lincoln "Salon Petite"

Concluded from page 1

appropriately uniformed for the occasion and carefully schooled in the proprieties.

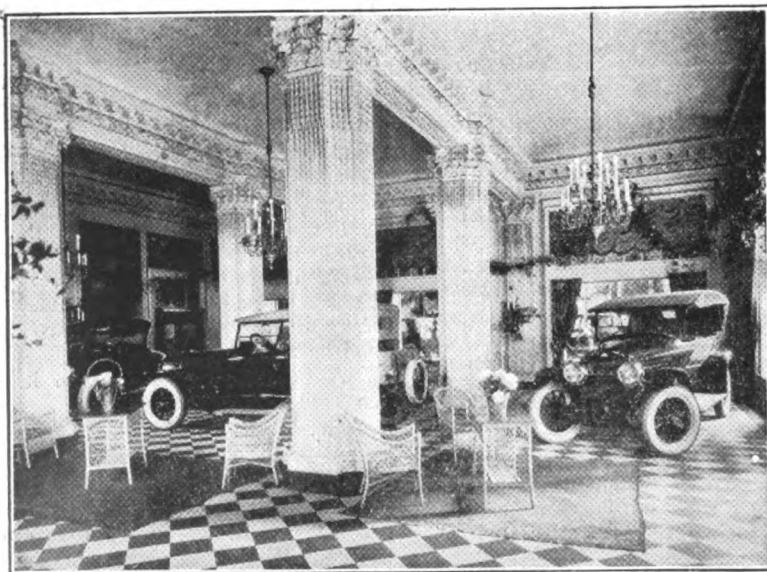
Upon entering the ballroom, visitors were asked if there was any particular Lincoln model they desired to see, and, in many cases, from then on it was not simply a plain matter of purchasing an automobile, but was the enthusiastic selection of one individual type, color and upholstery out of the representation.

Also included in the exhibit was a highly polished and finished cut-out chassis, which attracted the interest of all present, especially those having mechanical tendencies. A competent attendant had charge of this feature,

and explained in detail the mechanism of the Lincoln car.

The Lincoln Salon Petite, which incurred no small expenditure of effort and capital, was a success to all Dealers, particularly those who had been working on prospects. Persons in quest of a quality car were enabled to enjoy a comprehensive view of all Lincoln designs, and expressed their pleasure at the display.

The Cincinnati show achieved a charming atmosphere that was dignified and impressive immensely assisting the salesman in his approach to the prospective purchaser. A similar display undoubtedly would prove successful in any metropolitan center.



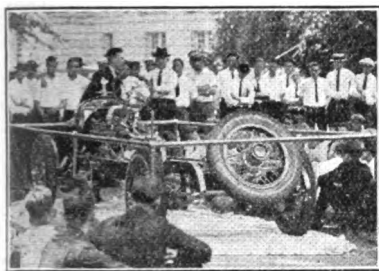
The Louis XIII Ballroom with Lincolns attractively arranged.

Ford World News Flashes

Concluded from page 1

improvement, as the tractor makes five round trips a day, compared with about two and a half trips formerly made with three horses.

The Lincoln Sales Department of Atlanta, Georgia, recently demonstrated the Lincoln chassis to the student body of the University of Ala-



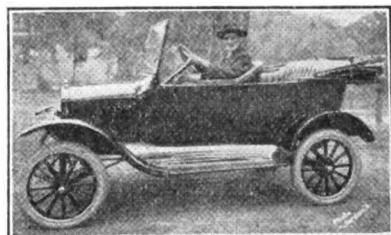
bama. The faculty of the university co-operated as much as possible and some 500 boys assembled to hear about the Lincoln. The talk was held under the Gorgas Oak, the central and most historical part of the campus.

Cincinnati, Ohio—No auto had ever collided with a motorboat in a river until the other day when William Rising, attempting to run his car into a garage, lost control and the automobile plunged over the steep embankment leading toward the Ohio River. Rising leaped out, and the car bounded over rocks and logs until it reached water, then skimmed the surface for about twenty feet, when it crashed into a boat anchored off shore. The machine, which sank until only the top showed above water, was pulled ashore with the aid of boats. Allowing it to drip and dry, Rising took his place behind the wheel and drove the "sea-going" car back to the garage. Of course, it was a Ford.

Goldsboro, Maryland—A thirty-inch water turbine, fed through three gates from a dam covering thirty-five acres, was able to supply only a third of power required to operate the machinery in use at the J. H. Hastings Flour Mill located here, and even less in dry weather when water was low. The Local Ford Dealer demonstrated the Fordson tractor's utility for such cases by belting it to the main shaft which operates thirteen pulleys. Under full load, with all machines working to capacity and fourteen elevators operating, the tractor worked with utmost efficiency.

Austin, Texas—That rare good judgment, possessed by the aged, inspired an Austin, Texas, man 99 years old to invest in the world's greatest motor car value. Mr. U. G. Bell is a Confederate veteran and the outstanding fact of this sale is that Mr. Bell learned, with the aid of a demonstrator, to operate and drive his Ford alone in one evening.

So far as we are able to learn this gentleman is the oldest purchaser



of a Ford car in his territory. Mr. Bell will soon be a centenarian. Despite this fact his eyesight is good, his hearing excellent and he is extremely active for one of his age.

This is the first car he has ever owned and he says he is getting more enjoyment out of it than anything he has ever owned.

Sawmill Output Increased Through Use of Tractor

Lumber Company Finds Fordson Excels Horses

The Southwest Lumber Company at their logging camp near Alamogordo, New Mexico, cut about twelve million feet of Western Yellow Pine, Douglas Fir and Balsam, a year. The sawmills were working at full capacity and faster than the logs could be supplied them. With horses they were handicapped as they could deliver but thirty logs daily with each team. The renewed activity in the lumber industry created a demand for their product out of proportion to their ability to supply. A total of 12 teams would deliver about 360 logs daily but because of bad weather and horses breaking down this mark was seldom reached. It varied from 150 logs to 250.

The general manager and superintendent agreed to witness a Fordson demonstration and a demonstrator and tractor were sent. Eighteen inches of snow fell the morning of the test and rain and sleet made the work most difficult. The Fordson started pulling from ten to twelve logs down the half-mile slide and worked all day without interruption. At the end of the day they had doubled the daily output for that slide. The regular output under favorable conditions with horses was 110 logs. In ten hours the Fordson had pulled to the railroad 236 logs. The logs averaged 1,100 pounds and the load pulled was about five and one-half tons. Working all day in mud and slush the operating conditions could not have been worse. The officials of the lumber company were so pleased with the result of the trial that they immediately purchased the tractor and ordered another for delivery the following week. They also

stated that just as soon as new slides were built more Fordsons would be bought. There are thousands of other lumber companies



The modern way of logging.

throughout America today that are handicapped in the same manner who might be operating efficiently with tractors instead of the old-style method. Horses followed oxen in skidding and handling logs. Fordsons will follow horses in the same manner.

Purchase Plan Film Under Way

The Department of Photography announces that a new two-reel film will shortly be available entitled "Golden Opportunity." This features the Ford Weekly Purchase Plan and undoubtedly will be in great demand by Dealers everywhere. The film, "The Ford Age," is being received and viewed by thousands of persons every week. Denver Branch reports that it ran for two weeks in leading theaters in that city evoking considerable interest at all performances.

Expedients are for the hour; principles for the ages.

Florida Everglades, Once Swamp, Now Prosperous Farms

Thousands of persons believe the Everglades of Florida to be vast swamps, overgrown with saw grass, palmettos and scrawny trees. The real Everglades country is vastly different. Not only are there beautiful homes and productive groves and farms along the edges of the glades, but in the midst of them are thriving towns and prosperous ranches. And this in spite of the fact that the

proposition made a few years ago to drain the Everglades was met everywhere by derision. So rapidly is the settlement of the glades going on that the real problem at this time is the lack of sufficient transportation facilities to move the bountiful harvests.

Water transportation facilities are being provided, the canals from the East Coast, and the one from the west side, being able to handle con-

siderable freight and some passenger traffic all the year around. Hard roads for automobile travel are gradually being built. From both sides of the state the distance is being lessened each month between the termini of the finished highways. The highway department making these roads has ordered a fleet of Ford trucks to be used in the construction of a million-dollar highway through

the Everglades. Thousands of waterfowl rise before the workmen, and deer and other wild animals penetrate deeper into the glades as the pioneering Ford trucks make clear the way for their thousands of brothers who will soon be speeding over the improved highways, invading the last stronghold of the Seminoles in the almost impenetrable jungle fastnesses of this semi-tropical country.



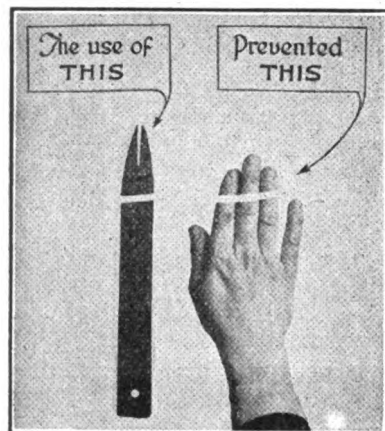
Fleet of Ford ton trucks used by highway department in building highway through Everglades.

Safety in Ford Plants Live Principle; Brings Increased Health and Happiness

Hamilton Plant Evolves Striking Bulletin; Wearing of Goggles by Shaper Operators Stressed

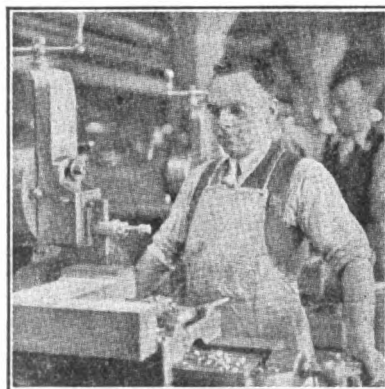
The prompt and thorough treatment of minor accidents and small cuts cannot be over emphasized. The Company maintains efficient first-aid departments to look after such matters and employees are urged to use them. The big majority of fatalities from infection start from seemingly trifling injuries which were not treated properly in the beginning.

The Hamilton Plant receives credit for the best Safety "idea" advanced during June. This consisted



of a bulletin, reproduced above, featuring very clearly the advantages of using tweezers to remove material from Punch Presses. It should not require anything more realistic than this illustration to insure the practice of Safety First.

The Safety Department announces that hereafter no shaper operator will be allowed to work either on cast iron or steel without first protecting his eyes; all goggles are properly ster-



ilized after each use; toolmakers with troubled eyes can provide their own glasses if they so desire. Department heads will be governed accordingly.

Some employees persist in throwing banana and orange peelings on

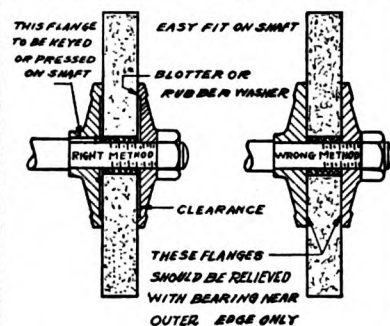
the floor, to the danger of fellow workers. The Safety Department reports three injuries to men recently from this cause.

Special garbage cans are provided to hold this waste. The type of employee who is so lacking in intelligence that he is guilty of this form of carelessness and disregard for fellow workers is usually inefficient in other ways, and the need of his services as an employee is apt to disappear.

Co-operate with the Company, and let us eliminate this foolish practice.

Grinders are indispensable in the manufacture of automobiles, and for this reason the greatest care should be exercised in their use; otherwise they become very destructive both as to equipment and man power.

One of the chief sources of grinder trouble results from improper mounting of grinding wheels. The Safety Department has prepared a sketch which is reproduced here



Study sketch for correct method of mounting grinders.

explaining very clearly the correct method to follow in mounting grinding wheels. Look this over carefully and next time you have occasion to work on a grinder, observe if the requirements have been followed.

Particular care should be taken to see that stops are sufficiently close to wheel.

It should be unnecessary to state that grinder operators must always wear goggles. The safe speed limit for grinders is 6,400 surface feet per minute.

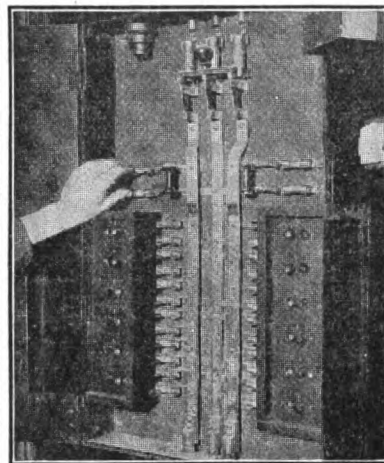
Always sound wheel before mounting to see if it has a clear ring. If not, it is imperfect and must not be used.

Another cause of trouble is due to the improper storage of wheels. The larger wheels must stand in a vertical position to prevent warping.

Careful following of the above instructions will result in practically eliminating grinder difficulties.

Many of our states have adopted electricity as the method of capital punishment.

Consequently, we never could



quite understand why some employees insist upon playing with fuses and testing for current with their bare hands.

To say the least, it's a dangerous habit—which causes many burns and injuries—and occasionally death.

Always use a properly wired test lamp.

There were an unusual number of fires in Ford Plants during June. Fortunately, all were of a minor character through quick action on the part of employees. The following list shows location and nature of each fire. How many of them could have been avoided through proper care and foresight?

Pittsburgh Branch.

1. Due to arc in heating unit of oven.

2. Piece of enamel fell from hook on electric unit, shorting same. St. Louis Branch.

While changing gas tank in Sedan, tank came in contact with battery cable, igniting fumes of tank. Milwaukee Branch.

Fire in pre heater end of enameling oven.

Los Angeles Branch.

Fire in enameling oven.

Highland Park.

1. Millwright moving a furnace broke fuel oil pipe, igniting oil.

2. Spark from furnace ignited dirt in blower.

3. Fire in oven of Artificial Leather Department. Due to cotton lint accumulation being ignited. Explosion followed. Oven to contain clean-out doors and six-foot explosion seals.

Kearney Branch.

Due to foreign substance in cotton. Small blaze.

Fire started under a small conveyor.

Cincinnati Branch.

Hood and chain fell on electric bus bar and the arc ignited enamel. Cleveland Branch.

Fire on two automobiles. Loose connections on generators caused spark to ignite gasoline line. fire following to gasoline tank.

The Phoenix Plant of the Ford Motor Company is turning out 6,500 cut-outs a day. Since the Plant was put in operation November, 1922, 900,000 cut-outs have been produced.

The Plant is located three miles north of Plymouth, Michigan, on a branch of the River Rouge, from which stream the water power is derived to operate the Plant. One hundred forty women are employed.

WWI Programs Cover Large Area

Weekly Concerts Are Anticipated by Radio Fans

The following telegram was recently received by the Ford Motor Company's Broadcasting Station—Station WWI

Dearborn, Michigan.

Program fine.

(Signed) Mrs. M. Sparks, Bushnell, Illinois.

The family of Mrs. Sparks is fortunate in owning an excellent receiving set. Bushnell is a thriving city of 3,000 population located less than 50 miles from the Missouri state line. The Sparks family have been able to hear WWI clearly on numer-

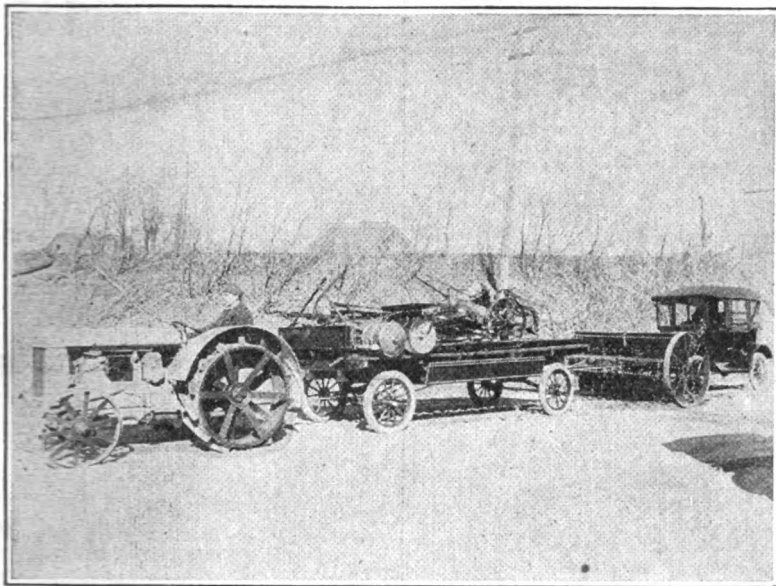


"Listening-in" on WWI.

ous occasions. They enjoy the programs given and look forward eagerly for each broadcasting date. They have a type L antenna 35 feet high and 108 feet long over all. They use one wire pointing east. The machine is a Westinghouse RC Cunningham 200 detector, with magnavox and Webster Murdock phones.

No man has a right to do as he pleases, except when he pleases to do right.

Farming by Modern Methods



The farsighted farmer who has purchased this complete outfit will be well repaid.

Illinois is a great state for Fordsons. Being third in population and having especially fertile soil, agriculture is important. Therefore, where the residents are making progress in farming, the Fordson tractor will be seen most frequently. The photograph shows a Dealer in Ford products making a typical Illinois delivery. Apparently when an Illinois

farmer purchases a Ford product he believes in making the purchase 100 per cent Ford. At any rate, here is the Fordson not only making its own delivery but also bringing along the implements best suited for the tractor. On the end is a Ford touring car. No doubt this wise purchaser realizes he has secured many hours of good service and reliability.

25 Fordsons Replace 200 Head of Horses

Lower Costs and More Work Result by Change

Demonstration Alongside Horses Shows Superior Fitness and Economy

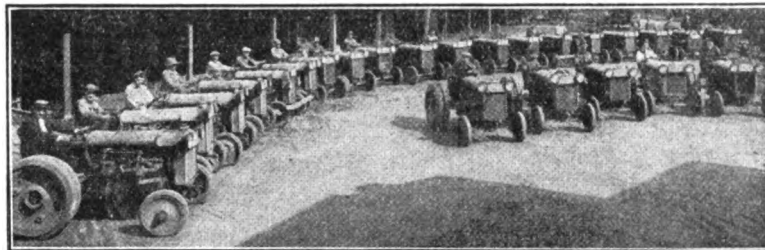
When E. G. Riselay, Ford Dealer at Buffalo, New York, first presented the idea of using Fordsons to do the heavy hauling, which was being done by horses at that time, to the Rock Asphalt and Paving Company, of that city, it was not thought practical by the officials of that company.

Persistent follow-up and requests for an opportunity to demonstrate, however, finally secured the interest necessary and an industrially equipped Fordson with a hitch designed for

dump wagons then in use was allowed to invade the territory held up to this time exclusively by horses.

The first task set for it was to pull a five-ton dump wagon out of a sand-hole. The Fordson succeeded where two teams of horses failed.

This resulted in the sale of two tractors. After a week of trial more were added until now a force of 25 tractors line up to do the day's work. Most of them are engaged in hauling from six to eight tons of asphalt, but two are engaged in scraping old broken pieces of asphalt into a dumping pit. Mr. Bardol, of the Rock Asphalt and Paving Company, expressed himself as completely satisfied with the work of the tractors. "The work is being done more rapidly and at a lower cost and we are no longer delayed by overheated horses," he said.



A unique grouping of Fordsons used for hauling asphalt.

Heart of Dark Continent Penetrated by Ford Cars

Concluded from page 2

room and a photographic developing room.

Again the adventurers set forth, penetrating jungles and veldts alike. The high clearance of the vehicles, plus their great power, light weight and durability made traveling possible through thousands of miles of trackless country, inhabited only by wild beasts and scantily clad, black-skinned savages.

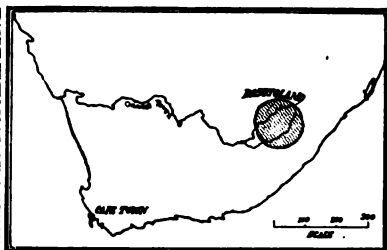
The only things that caused the caravan to hesitate were precipices or rivers too deep to ford. Upon reaching a steep incline bands of natives were assembled, often from near-by tribes, and with the aid of cables the cars were snubbed down, or drawn up, as the case might be. When deep streams were encountered, a score or more of natives found little difficulty in picking the cars up bodily and carrying them across.

Gasoline and oil to keep the white men moving were relayed into the wilderness on the backs of native porters.

Tens of thousands of black men encountered along the route had never seen an automobile before. Whole native villages were stampeded at times as the cars approached, the Negroes hiding in the jungle, and then creeping cautiously out when they found that the white men and their strange "self-moving"

vehicles meant them no harm. Others, hearing of the machines, traveled afoot, often hundreds of miles, just to get a view of them.

Not a few of the shots entering into the film, "Hunting Big Game in Africa," were obtained at great peril and with difficulty. Taking close-range moving pictures of lions, wild elephants, leopards, rhinos, and other fierce African beasts, especially when



Shaded portion in circle indicates extent of trip through darkest Africa.

without their consent, cannot appropriately be called a safe undertaking.

In this respect, the cameraman put the versatility of the Ford car to many tests. In numerous instances the touring car was used to pursue the animals until they became exhausted. This offered a good opportunity for close-up photography. Sometimes these beasts became en-

raged and turned to give battle to their strange adversary, but could make little impression upon the hardy Ford radiator. At another time, a baboon and the Ford car took the leading parts in an amusing game of hide and seek. Some of the photographic records of these encounters would make the average movie comedy a dismal thing in contrast.

For sheer breath-taking excitement, the invasion of this animal kingdom by the explorers would be hard to beat. One whole night the cameraman, armed only with a shotgun and accompanied only by a boy native, slept in the jungle far from camp so that he might be ready at daybreak to film animals visiting a near-by water-hole. Cushion-footed animal prowled about menacingly and one during the night the hidden man saw two green eyes near, and, seizing his gun, fired. The next morning he was able to exhibit a dead lion, shot in the nose. The skin of this beast is one of the many souvenirs in the collection brought back to California.

The Ford cars proved their worth to the expedition in countless ways. They plowed merrily along over roads that are roads in name only, over rocky plains "paved" with volcanic slag, and even through lakes and rivers without turning a nut. More than seven thousand miles was

covered by each car. Beyond this, the machines were indispensable in handling big game, such as buffalo, when these had to be carried back to the settlement.

Since visiting Africa and seeing the phenomenal success made possible by the use of the Ford cars, Mr. Wilton is convinced that three-fourths of the "dark continent" can be so motored in quest of game in the dry season.

For this reason the cameraman contemplates making another but more extensive motorized animal photographic expedition. To augment the work with Ford cars he is perfecting a gas, and a means of throwing it, with which a lion or other jungle creature may be "put to sleep" for photographic purposes. A mask would protect the operator, and the effect upon the animal would be only temporary.

In South America, Brazil has a motor vehicle for every 1,497 persons. Argentina, one for every 296, and Chile, one for every 455.

Austria has put out a series of seven postage stamps. Each issue bears the portrait of a famous musician.

Future Programs Station WWI

September 5, 1923.

Commencing at 8 p. m.
Wave Length, 273 meters.

Guitar Solo—*The Tropical Blues*: by Mr. Bailio Nuesca.

Vocal Solo—*Last Night: The Rosy Morn*, Roland: by Miss Mildred I. Smith, accompanied by Miss Irene Kronbach at the piano.

Cornet Solo—*Bonnie Sweet Bessie*, J. L. Gilbert; *Sacro Song*, from *Ave Maria*, C. Gounod: by Mr. John De Natali.

Health Talk No. 74—*Significance of Hoarseness*: by Dr. W. T. Garretson, Department of Surgery, Henry Ford Hospital.

Vocal Solo—*I Will Miss You, Dear, When You Are Gone* (Filipino tongue), *Dear Old America*: by Mr. Bailio Nuesca.

Reading—*Mr. Daniel and the Lions*: by Miss Mabelle A. Knowlton.

Tenor Solo—*Just for Today*, Jane Bingham Abbott; *A Rose in Heaven*, Trotter: by Mr. Joseph Tracy, accompanied by Miss Anna L. Youngs at the piano.

Guitar Solo—*Smilin' Through*: by Mr. Bailio Nuesca.

Vocal Solo—*One Fine Day, Madame Butterfly*: by Miss Mildred I. Smith, accompanied by Miss Irene Kronbach at the piano.

Cornet Solo—*My Heart at Thy Sweet Voice*—Cantabile from *Samson and Delilah*; *Intermezzo—Humoresque*, A. Dvorak: by Mr. John De Natali, accompanied by Mr. E. Zenker at the piano.

Reading—*He Worried About It*: by Miss Mabelle A. Knowlton.

Tenor Solo—*Duna*, McGill; *In the Garden of My Heart*, Ball: by Mr. Joseph Tracy, accompanied by Miss Anna L. Youngs at the piano.

September 12, 1923.

Commencing at 8 p. m.
Wave Length 273 meters.

Orchestra Selection—*Melodie*, Massenet, Opus 10: by River Rouge Orchestra.

Baritone Solos—*Gipsy John* (Charles Clay); *Brown October Ale*, from *Robin Hood*, by Mr. William Metzger, accompanied by Mrs. Metzger at the piano.

Hungarian Flute Solo—*Hungarian Melodics*, by Mr. E. J. Farkas.

Vocal Solos—*I Love You Truly* (Carrie Jacobs Bond); *Crying for You*: by Miss Irene McCrie, accompanied by Mrs. Lois Duford at the piano.

Orchestra Selections—*Barney Google*; *Yes, We Have No Bananas*: by River Rouge Orchestra.

Health Talk No. 74—"The Fundamental Medical Sciences," Dr. J. K. Ormond, Surgical Department, Henry Ford Hospital.

Baritone Solos—*Bid Me To Love* (Hatton); *Ah, 'Tis a Dream* (Hawley): by Mr. William Metzger, accompanied by Mrs. Metzger at the piano.

Hungarian Flute Solos—*Southern Melodies*: by Mr. E. J. Farkas.

Violin Solo—*Selected*: by Carl Voelkner.

Vocal Solos—*Just a-Wearyin' for You* (Carrie Jacobs Bond); *Days of a Short While Ago* (E. P. Wormack): by Miss Irene McCrie, accompanied by Mrs. Lois Duford.

Piano Solo—*Selected*: by A. D. Gentile.

Hungarian Flute Solo—*Mighty Lak a Rose*: by Mr. E. J. Farkas.

Baritone Solos—*Dream* (Bartlett); *At Dawning* (Cadman): by Mr. William Metzger, accompanied by Mrs. Lois Duford.

Orchestra Selections—*Dreamy Melody*, Valse Lento: by River Rouge Orchestra.

Trade at Ford Stores; Save Money

Sugar is gradually getting cheaper. The Ford Store is now selling this item at eight cents a pound. There seems to be plenty for everybody.

Last Saturday 2,200 loaves of bread were sold.

Don't forget when it comes time to buy school shoes for boys and girls that the Ford Shoe Store is ready to supply you. Buy them here and spend the difference for other needed articles.

We want the particular man to come in and look at our new autumn shoes. There isn't anything better made.

Grocery News.

| | |
|--|--------|
| 5-pound jars combination fruit jam | \$1.10 |
| Red raspberries, 2-pound can... | .26 |
| Red pitted cherries, 2-pound can | .27 |
| Bartlett pears, 2-pound can.... | .22 |
| Hawaiian pineapple, 2-pound can | .24 |
| Weideman country gentleman corn | .14 |

Company used cars for sale—Ford roadsters, Coupes, Sedans, touring cars and trucks.

For above, see J. T. Thomas, Used Car Department, Highland Park Plant. Phone 651.

| | |
|--|-----|
| L. & S. Prepared Mustard, .09 | |
| 3 for | .25 |
| Pure honey, 5-pound pail..... | .83 |
| Sweet mixed pickles, 1-quart jars | .33 |
| Sweet whole pickles, 1-quart jars | .33 |
| Sour mustard pickles, 1-quart jars | .33 |
| Wayne soap flakes, 3 pounds... | .25 |
| Star Naptha Powder, large.... | .22 |

Drugs.

| | |
|--|------|
| 100 soda mint tablets..... | .15 |
| Highland Rose Cold Cream.... | .15 |
| Highland Rose Talcum powder 1 pound..... | .15 |
| Prophylactic tooth brushes, adults size..... | .31 |
| Horlick's Malted Milk, 5 pounds | 2.65 |
| Horlick's Malted Milk, large... | .67 |
| Horlick's Malted Milk, small... | .34 |
| Mead's Dextri Maltose, 1 pound | .55 |
| Mead's Dextri Maltose, 5 pounds | 2.35 |
| Castor oil, 1 pint..... | .31 |
| Blue work shirts..... | .79 |
| Blue overalls, pair..... | 1.45 |
| Men's work hose, 3 pairs..... | .40 |
| Work pants ...\$1.45 to \$2.75 a pair | |

If you intend to go to work there is no better place than right where you are; if you do not intend to go to work you cannot get along anywhere. Squirming and crawling about from place to place can do no good.

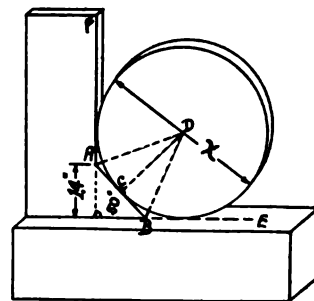
—Abraham Lincoln.

Problems

If there are explanations or comments regarding problems, write the Henry Ford Trade School, Ford Motor Company, Detroit, Michigan.

No. 66

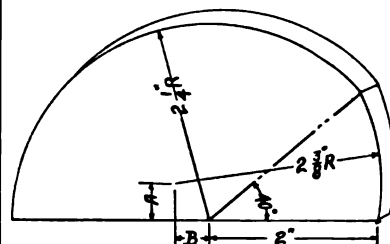
The following drawing has been purposely distorted to bring out details.



DETERMINE χ .
 $AB = 1.4(\text{COSEC. } 50^\circ) = 1.8275'$
 $\angle ABE = 180 - 50 = 130^\circ$
 $\angle ABD = 130 \div 2 = 65^\circ$
 $\angle FAB = 180 - 40 = 140^\circ$
 $\angle BAD = 140 \div 2 = 70^\circ$
 $CD = AB \div (\cot \angle ABD + \cot \angle BAD) = 2.201'$
 $\chi = 2(CD) = 4.4022'$

Try This

No. 67



DETERMINE A AND B.

FORD IDEALS



This volume of 452 pages, durably bound, contains 98 articles which have appeared as Mr. Ford's Page in THE DEAR-BORN INDEPENDENT. These articles deal with industrial, social and economic problems. They are inspirational and informative.

\$1.00 a Copy, Postpaid

Ford Football Crew Is Seeking Coach

A coach for a school football team is wanted and is asked to communicate with F. W. Edwards, School Building, Highland Park, Telephone 503. One that "knows the game" and who can snap an aggregation into winning form is desired.

"He has a great faculty for putting the cart before the horse."

"Oh, I wouldn't say that; say he has a habit of trying to make the wheels run the machine."

It was a hot sultry day in a great city. Seven cars were lined up in front of a busy filling station. Third from the end stood a leaking, steaming, rattling little five-passenger. In due time the line dwindled and the little five-passenger found itself parallel with the gas pipe.

"How many?" the man asked impatiently.

"One," answered the owner with the air of a Rockefeller.

"One? What cha' tryin' to do? Wean it?" Judge.

Ford News

Volume III. L

Dearborn, Mich., September 1, 1923

No. 21

Los Angeles to Assemble 200 Cars Daily

Addition Now Finished; Many New Machines Added

Closed Bodies, Cushions, Springs and Seat Backs Part of Branch Production

The actual construction of the addition to the Los Angeles Branch is now completed, and although certain of the equipment is yet to be installed, the assembly line is under way and one hundred cars and trucks are being driven away every eight hours.

The addition, which is 341 feet long by 132 feet wide, comprises two stories and conforms nicely with the original building, making the entire structure appear as one complete unit. It is of reinforced concrete faced with red brick and granite base. The removal of the end of the original structure, where the addition was joined, permits of a clear floor space of 541 by 132 feet. The second floor and roof are of structural steel with two monitors running the full length of the new addition. Two rows of ventilators on each side of the monitors, operated by electric motors, give adequate ventilation and light. The structural steel design makes necessary but two rows of columns and this gives an ideal arrangement for manufacturing purposes.

Prior to the World War the Los Angeles Branch assembled fifty cars a day, but since that time its activities have been confined principally to service, the manufacture of springs, cushions and seat backs and more recently to the construction of closed

Concluded on page 4

On August 2 the Hamilton Plant established a new high record for the production of wheels; having turned out 8,684 in the sixteen-hour period, exceeding the previous high record on July 17 of 8,258 by 426 wheels.

This is an output of 542 wheels per hour, or one wheel every six seconds.

Daily Record Tops 7,300 Mark

Car and Truck Output Climbs to New Peak

The mounting output of the Ford Plants brought a series of broken daily production records during the first half of August. On August 9 the output of the Domestic Assembly Plants reached a total of 7,225 Ford cars and trucks, exceeding the previous high record of July 31 by 104.

August 11 the production climbed to 7,236 and on August 13 to 7,270. However, this record stood only for a few days and was broken when daily production went over the 7,300 mark on August 15 with an output of 7,309 cars and trucks.

Domestic production for the week ending August 21 was 34,744. A total of 1,721 tractors was turned out during that period.

More than 1,300,000 Ford cars and trucks have been manufactured this year making a grand total of more than eight and a quarter million Model T motors that have been produced by the Ford Motor Company.

Changes in All Models Carry Many Refinements

Entirely New Body Design for Coupe; Interior Improvements Added

New and improved body lines for all types of Ford cars are announced by the Ford Motor Company, which states that the changes have been effected and that the various types are now in production.

A larger radiator has been made standard for all types and this in turn has made possible refinements in body design. There is, however, no radical departure. The radiator, an inch and a half higher than that formerly used, has an apron at the bottom which joins similar apron effects on the fenders. The larger radiator also obviously increases cooling efficiency.

The Coupé is of entirely new body design and construction, revealing a more trim exterior, a greater luggage carrying capacity and more comfortable seating.

From the dash the lines sweep gracefully in the cowl to the radiator. The doors are wide and open forward, according easy entrance and exit. They are heavily framed and their improved rigidity and strength

Concluded on page 5

All Valves Made at Northville Plant

Total Output Reaches 44,000,000; Three Shifts Working

The remarkable production of the Ford Motor Company's Plant at Northville, Michigan, singles it out as one of the most outstanding of the several smaller manufacturing units located throughout the country. Although the Northville Plant is seldom heard from, publicly, nevertheless in whatever part of the world the Ford car is to be found it carries with it the product from this Plant.

Having been engaged in the manufacture of Model T and tractor valves since it was opened in March, 1920, the Northville Factory has produced more than 44,000,000 valves. At the present time the Plant employs 350 men working three 8-hour shifts and turning out 85,000 Model T valves and 10,000 tractor valves daily or approximately two and a half million valves a month.

Fertilizer Made at Rouge Plant

Ford Ammonium Sulphate Recommended for Lawns

The following article is published in answer to numerous inquiries by Ford employees regarding the use of Ammonium Sulphate on lawns and gardens.

Ammonium Sulphate sold by the Ford Motor Company is one of those by-products in the distillation of coal that make our modern coke ovens assets rather than necessary liabilities. The element which is of greatest interest in Ammonium Sulphate is Nitrogen.

A balanced fertilizer like a "balanced ration" must be made up of more than one plant food. The three vital elements in plant life are nitrogen, phosphorous and potassium and to grow plants all three are needed. There are other elements in soils that are sometimes referred to as fertilizers but they are such only in that they make it possible for the plant to assimilate the true foods or fertilizers. These latter elements are best represented by the examples of lime and organic matter or humus.

Ford Ammonium Sulphate consists of 20-21 per cent available nitrogen and is commonly known as one of the world's best commercial carriers of this element. Nitrogen is sometimes referred to as the quickener of growth and in many cases Ford Ammonium Sulphate in consequence is of great value alone. It should, however, be borne in mind that it is better used in connection with phosphates and potash compounds.

Applied as a top dressing where nitrogenous material alone is needed it is very valuable. When used with vegetables and growing garden crops,

Concluded on page 5



Los Angeles Branch building; new addition at left.

Ford News

ESTABLISHED 1920

Issued for the employes of the
various Ford Interests.

Vol. III, No. 21

September 1, 1923

PUBLISHED SEMI-MONTHLY

Motto

The great service of Mr. Harding was to give the nation a quiet period for thought. He was not a noisy President. He did not regard himself as a national entertainer. He did not divert the public mind from its own thoughts to his thoughts. He refused to break the spell of public thoughtfulness by calling a special session of Congress. He had a horror of what he called "undeveloped idealism," by which he meant fine words that were never realized in fine actions. He did not feel called to do great acts but to prevent small wrong acts being accomplished. In this he showed one of the qualities of a great executive—When there was nothing to do, he did nothing. When the value of that kind of wisdom is recognized, Warren G. Harding will have the credit which is his due.

—Henry Ford.

A Word of Warning

For miles about Detroit and its suburbs, as well as other cities wherein Ford Plants are located, the land is being subdivided into lots of small sizes to attract the investor and home-site seeker. Ford employes represent a good proportion of the people who are being induced to buy these lots; and in many instances the promoters of the realty projects frankly address themselves to the Ford worker and his needs. Unfortunately, some who thought to take advantage of the opportunity afforded them for investment, or of acquiring a lot on which to build a home, have entered into contracts to purchase only to become disappointed later on with their bargains. In most cases the reason is that the purchaser failed fully to acquaint himself with the exact nature and effect of the agreement into which he had entered; or neglected to determine fully the duties and obligations that devolved upon him as a result of his undertaking.

A buyer of real estate should first satisfy himself as to the integrity and honesty of the party with whom he is dealing.

Secondly, he should find out for himself the condition of the title to the property he intends buying and whether the party selling is able to convey good title. This can be done by demanding an abstract of title properly certified to date and having

it examined by a competent lawyer.

The third and perhaps most important point of all is that he should know exactly what is called for by the agreement under which he is purchasing the property. He should know how his payments are to be applied as to principal and as to interest. How long a time he has in which to complete payment; it may be, as is very likely the case, that payment in full is required by the terms of the contract at a time earlier than the date on which payment would be completed by simply applying a portion of the monthly payments to the principal. This circumstance has been a source of misunderstanding and annoyance to purchasers simply because they erroneously assumed that as a monthly payment was stipulated, nothing remained for them but to keep up the payments until the property was paid for. Nothing should be taken for granted. The law presumes that the agreement to which one puts his signature is his agreement; it will not and in the nature of things cannot always consider the fact that the one signing did not intend to agree to a certain part of the contract or that he forgot to read another part.

The fourth and concluding suggestion we offer is this: In the event of a difference arising it should be remembered that one is not obliged to accept the other contracting party's interpretation of the agreement. He may be wrong, and if he has in any way misrepresented or misled you, the consequences are yours. The whole matter should be placed before a competent attorney and his advice carefully followed.

Getting Quick Results

A man with a big sledge hammer in his hand opened my office door while I was dictating and said, "Will it disturb you if I disconnect your radiators now?" (We were enlarging our building and the radiators had to be moved.)

"With a sledge hammer?" I asked, wondering why he did not bring a big pipe wrench.

"Sure," was the answer, and before I had recovered from my surprise, he tapped the elbow joint deftly two or three times and it broke. Pushing the pieces with his toe, he said, "That piece cost about six cents. To disconnect your radiators my way takes about one minute per radiator. Which is best?"

And with a smile he repeated his operation on the other radiator and was gone.

I wonder if a lot of us are not pussyfooting around trying to do things quietly with pipe wrenches, where we ought to use the good old sledge and get quick results.

Reprinted from Quota, published by R. L. Polk and Company.

The road that leads to heaven: Turn at once to the right and go straight forward.

A victory obtained by might without right is only postponed failure.

Tractors Come to Rescue of Russia's Starving Millions

Peasants Learn to Drive "Iron Horses" and Are Amazed at Their Marvelous Performance

Relief organizations have mitigated only to a certain extent the deplorable situation in Russia insofar as it deals with the lack of food. The scarcity of horses and equipment

1922 2,348
1921 723

A study of the table above will indicate that these nations are demanding more tractors just as fast as conditions permit. The foreign exchange is improving, conditions are recovering from the effects of the war, and these people are taking the first opportunity that presents itself to invest in American farming equipment that will help them really to raise food on their farms. The British Isles, Scandinavian countries, the Argentine, Australia, New Zealand, South Africa, Greece, Syria, Jugoslavia and Czecho-Slovakia all outstand in their increasing demand for Ford products.

It is amazing that at many places throughout Russia the tractor has



Upper—Sorochinskoye, Russia, a center of tractor activity. Right—Assembling Fordsons from U. S. A. Circle—Plowing in a famine region.



with which to work serves as an obstacle to the cultivation of thousands of acres of fertile land, and it is agreed that the old-time methods of farming will never meet the problem of feeding Russia's starving millions. Relief organizations realize that the solution to the problem lies in applying modern methods. As a consequence, one of the first things done along this line was to set hundreds of tractors to work on the vast steppes. Russia cannot overnight get all the tractors needed properly to manage the work at hand, but thousands will be in use before a normal market condition is reached again. Then should this great country cast aside poverty as well as the gaunt specter of hunger.

The most recent export figures of the Ford Motor Company show that during the year ending July 31, 1923, a total of 627 Fordson tractors were shipped to various points in Russia. This quantity far surpasses any previous orders, and, in fact, an increasing predominance of the tractor has been noted in all of the countries abroad. During the first six months of 1923, sales of Fordson tractors abroad were more than one hundred per cent greater than those of the same period a year ago. The following figures show Fordson sales abroad for the first six months of each of the last three years:

1923 5,034

never before been seen. Needless to say, the peasants are astonished when they get their first glimpse of the sturdy "iron horses," and are even more surprised when they see what the Fordson can do on a field. Naturally there is a shortage of experienced drivers, and tractor schools have been opened to teach the why and wherefore of "gas engines," and "cylinders" and "crankshafts," and so forth. Everyone is on his toes to learn. Only through actual demonstration can many of these farmers be made to believe that one tractor can perform the work of a hundred oxen and fifty men, to say nothing of the operating economy and the numerous other uses to which the tractor may be put. But, credible or not, herein lies just the point that spells salvation for Russia—the force before which the darker shadows of the famine will recede.

Fordson Proves Usefulness in Clearing Cut-over Timberland

Michigan Agricultural College Through Tests Demonstrates Utility

The reclamation of the vast waste areas in America is a worthy project. The converting of swamps and deserts into farm homes is not a new adventure but there is still much to be done along this line. Very few people know the tremendous amount of acreage of unused land that exists in this country today. Extensive reports of the Reclamation Service of the Department of the Interior places the estimate of swamp, desert, and cut-over timberlands at 192,000,000 acres. Roughly, the swamp areas comprise 20,000,000 acres, the irrigable lands 15,000,000 acres while the balance is in the cut-over lands of the southern, lake and northwestern states. Scientific farming demands that these thousands of acres of tillable lands be made ready for the plow. Modern machinery demands it and the requirements of the United States demand it.

The world need of an unfailing supply of food has resulted in a need

of the Land Clearing Division had motorized land-clearing equipment which made it possible to visit every rural district in the counties where work was conducted. Each train consisted of an auto truck, a Ford car and a Fordson tractor and trailer. The Fordsons were equipped with hillside lugs and two drivers were furnished to operate this equipment. The tractors were equipped with rubber wheels for traveling over the road and also a trailer for carrying part of the field equipment. The Michigan Agricultural College provided two trucks and two Ford cars



Upper left—Field to be cleared 9 a. m. Lower—3 hours later. Upper right—Handling stumps like this is no small task.

of more land on which to produce this food and a need of more power to produce it. The production of food in the United States has not kept pace with the growth in population. During the past 13 years our population has increased about 33 per cent, while the production of wheat and corn has remained practically stationary. Mechanical power in the shape of the tractor is needed to help farmers increase production in proportion to the increased need of food by our own population.

That the tractor can be used to advantage in reclaiming cut-over land has been proved by the Land Clearing Division of the Michigan Agricultural College. This division conducted the first land-clearing train ever run in the state of Michigan and well proved the worth of the Fordson in land clearing. Each section

with the additional men and equipment to make up two complete land-clearing crews. The equipment carried on each train consisted of a horse power and one-man stump puller, a wheelbarrow stump puller, a homemade Paul Bunyan's Hammer, an "A" Frame for pulling stumps with tractor, a homemade root hook, dynamite and picric acid, blasting tools, a Fordson tractor, an Oliver No. 3 breaking plow, handy stone boat, and a Frost Trip for piling stumps.

Six hours from the time of arrival at the first demonstration grounds in Gogebic County the stumps had been pulled, the land cleared of debris, plowed and ready for harrowing and planting. This was a particularly difficult piece of ground because of the nature of the stumps which were all deep-rooted and

Window Displays Aid in Increasing Circulation

freshly cut. There are approximately 157,000,000 acres of just such land as this waiting to be made productive. Modern machinery and the tractor is making it possible to farm more acres and better than by the old method. There is no longer any excuse to allow such unreclaimed land to go untillable because of the difficulty of removing the stumps.

Sales Records of Unusual Merit

Piling up enviable personal sales records has become quite the fad among the salesmen of the Ford Motor Company's Dealers.

Reports have rolled in recently from different sections of the country drawing attention to the whirlwind efforts of members of the sales force.

From Los Angeles comes an account of the selling of forty-eight Ford cars and trucks during the single month of May by C. G. Ortiz, who handles Mexican trade chiefly. He is always "on the job," and states that he does not intend to rest on his oars.

Mr. Joe Fleece, Lincoln salesman with a Memphis Dealer, crowded four Lincoln sales into one week, the orders including one Sedan, one Phaeton, and two touring models. Mr. Fleece is one of the best known and oldest salesmen, in point of service, in his city.

Another monthly record is claimed by a Tacoma Dealer for their salesman, Mr. W. M. Thompson, who signed thirty-three orders for Ford cars and trucks in the first twenty-six days of March. One day Mr. Thompson closed seven Ford sales, in spite of the handicap of a severe sore throat.

These achievements are highly gratifying, and show what can be done by those salesmen who are alive to every opportunity. Undoubtedly the publication of records of this nature will bring forth an avalanche of other personal high sales marks.

Dealers' Attractive Exhibits Bring Results

Forceful Publicity Shows Public What Dearborn Independent Really Is

One factor which had considerable influence in shooting the circulation of THE DEARBORN INDEPENDENT over the recently announced half-million mark is the part played by Ford Dealers in attracting the public attention to the weekly. One very effective method used by live dealers to put THE DEARBORN INDEPENDENT before the public eye and secure new readers is by means of window displays, always a forceful medium of publicity.

Magazines afford material for very interesting displays, and Dealers have availed themselves of this opportunity, in many instances giving their show windows an especially novel and artistic touch.

One such exhibit which attracted considerable attention is reproduced on this page, and was arranged by the New Jersey Auto Company, Dealer at Newark, New Jersey. It is at once evident that the design entailed considerable effort and, moreover, was distinctly original; but the result was that in two weeks this agency secured more subscriptions than during a previous period of four months! In a large measure this was due to emphasizing the predominant features of the magazine.

Equally as commendable was the display created by the Richmond Motor Company, Richmond, Virginia, Dealer. In this, numerous tape streamers led the eye from a central point to different sample pages from THE DEARBORN INDEPENDENT that were posted on walls, very effectively bringing out the wide range of subjects covered in the magazine.

During the coming weeks there will be numerous fairs where Dealers will have representatives and these present opportunities for displays of this nature.



Clever display which brought results.

Programs From WWI Praised by Listeners-in

Popular Numbers Furnished by Orchestras; Health Talks Continue to Please

Popular selections, "Babbling Brook" and "You Tell Her, I Stutter," played by the Fox Brothers Orchestra, opened the WWI program on the evening of August 15. The swing and snap of these, as of later selections by this orchestra, were irresistible to those who enjoy this type of music.

The clear and altogether enjoyable voice of Mrs. Lois Duford is not new to our listeners-in, and it was a real pleasure to hear her delightful soprano solos on this evening. Mrs. Duford was accompanied by Mrs. William J. Stein at the piano.

A new voice to our listeners-in, that of Mr. Truman Holt, proved a

audience, the choice selections on this evening's program, which he played with deep feeling and his usual excellent technique, were more than usually delightful. Mr. Park was ably accompanied by Mrs. William J. Stein at the piano.

"Serenading Four" was the auspicious name chosen by the instrumental quartet who opened and closed the WWI program of August 22, as well as contributing several other lively numbers during the course of the evening's program. Those who enjoy popular music must indeed have appreciated the snap and pep with which these numbers were played. Striking variety of unusual appeal



Upper—Fox Brothers Orchestra.
Oval—Mary Helen Holmes.
Panel, left to right—Edgar Peters,
Leon A. Weetzer, Ray L. Depp-
mann and L. E. Reinert.

welcome surprise in the tenor solos he sang, which were most happily chosen and were sung with much expression.

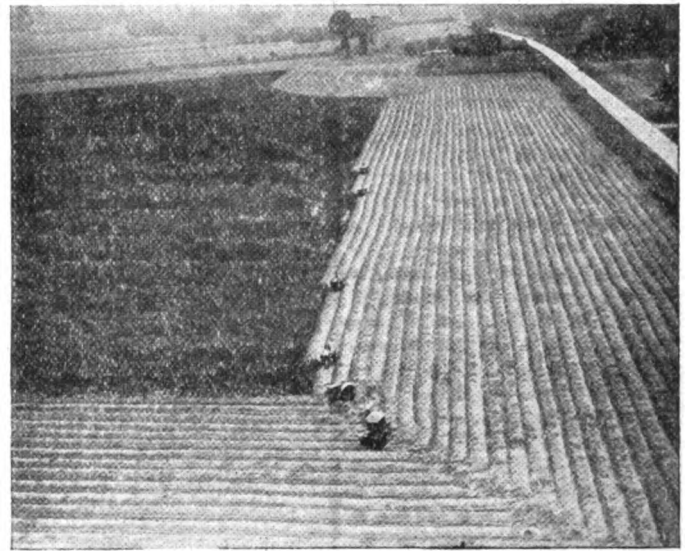
Mr. Holt was accompanied by Mrs. Alice MacCord, who also contributed a much appreciated humorous number to this program in her reading of a "Dutch Monolog." Mrs. MacCord's interpretation of this delicious bit of rollicking fun added a pleasing variety to the program, which was further enhanced by the charming duets, "The Land Where the Good Songs Go" and "Smilin' Through," sung by Mrs. Alice MacCord and Mr. Truman Holt.

Although the violin music of Mr. David Park is not new to the WWI

was lent the music of the "Serenading Four." Mr. Leon Weetzer delighted the audience by his playing of "The Rosary" as a steel guitar solo, and, by special request, played a spirited banjo solo. Another one-fourth of this group, Mr. Edgar Peters, demonstrated much skill, and gave a good share of enjoyment to listeners by his rendition of "Coaxing the Piano," a piano solo.

The very pleasing lyric voice of Miss Mary Helen Holmes again charmed the listeners-in on this evening with a number of selections of rare beauty. Particularly delightful were the mysterious and enchanting solos, "Pale Moon," by Logan, and "Ave Maria," by Mascagni. Miss

Eye of Camera in Airplane Catches Scene on Ford Farm



Haying on the Henry Ford Farms at Dearborn is always an interesting sight to the passer-by who pauses at the roadside to watch the fleet of Fordsons with mower attachments making rapid inroads into the broad expanses of waving grass. But how much more impressive the scene from an airplane is shown in the above photograph taken during the season just past. At first glance one is deceived into believing that the long regular swaths of new-mown hay are plow furrows; however, closer inspection discloses the Fordsons each carrying its clean, even cut.

Elizabeth Moore accompanied Miss Holmes on the piano.

Mr. Roland Baker was accompanied by Mrs. Adarae Bratton in his baritone solos, which were very pleasing.

"Infantile Paralysis," the subject treated by Dr. Peabody in his Health Talk on this evening, was sanely and clearly explained, and much helpful information and advice was given which should prove invaluable to any person having this problem to deal with. Copy of this talk, which is Radio Talk No. 73, may be had by requesting the talk by number from the Ford Broadcasting Station, Dearborn, Michigan.

Los Angeles to Assemble 200 Cars Daily

Concluded from page 1

bodies. The cushions, springs and seat backs have taken care of the Branch requirements at San Francisco, Portland and Seattle, in addition to the quota needed at the Local Plant. A portion of San Francisco's closed body production has also been supplied by Los Angeles. With the installation of a new garnett machine the Los Angeles Branch will have a production of four hundred complete sets of cushions and seat backs every twenty-four hours.

The added equipment is of the latest type and has been arranged in the most advantageous manner. The new body ovens, which will shortly be installed, will have a capacity of sixty closed and one hundred open

jobs each eight hours. They will replace the present ovens which handle but thirty-four jobs in the same length of time. New enameling ovens are also being installed to take care of the entire Branch production. An additional boiler has been placed to provide the necessary heat units to carry these new ovens.

This new addition at Los Angeles will permit the assembling of two hundred cars and trucks a day. When the complete equipment has been installed and the full production schedule is in progress, approximately eleven hundred men will be required to carry on the program. Closed bodies will be furnished for the San Francisco Branch territory.

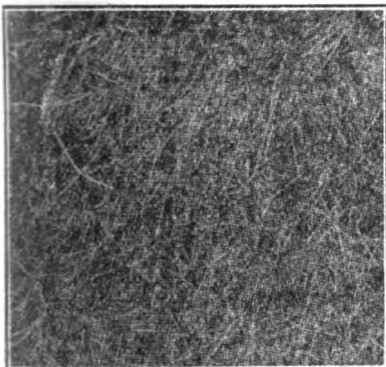
Now that the Los Angeles Branch is assembling cars and trucks, the long haul over the mountains and deserts, which so often proves detrimental to automobile shipments, is eliminated.

The South Tamworth Industries, Inc., of Ossipee, New Hampshire, haul 1,000 feet of green hemlock logs on two army trailers, the tractor and trailers making three trips daily on a 14-mile road. Another tractor in this vicinity hauls 4,500 feet of sawed lumber over a 12-mile trip each day. The small operator finds it to his advantage to work with Fordson equipment. A heavier tractor would consume more fuel and be more expensive to run. The Fordson, because of its size, is capable of going deeper into the woods to more remote skidways for its load.

Fertilizer From Rouge Plant Good for Lawns and Gardens

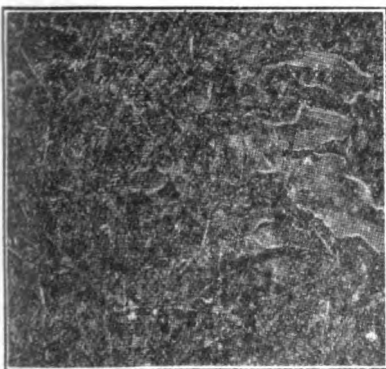
Concluded from page 1

results should be very noticeable in one or two weeks. As it is a highly concentrated product it should be sparingly used and it is always best to apply it as a top dressing only when vegetation or foliage is dry. If the application is made when vegetation or foliage is wet, the Ammonium Sulphate should be washed into the ground immediately by a thorough sprinkling in order to avoid any



Fertilized with Ammonium Sulphate as nitrogen carrier.

possibility of burning. If desired it may be applied in the form of a spray or sprinkled through the leaves of the crop treated. One tablespoonful of Ammonium Sulphate to a gallon of water will give the best results if used in this manner. It is best to use it dissolved in water for treating vegetation in greenhouses and small gardens. When used with irrigation pipes it is necessary that the pipes be flushed with clear water afterward. For general garden use it can be sprinkled and



Fertilized with other nitrogen carrier.

raked into the soil about one pound to every 150 square feet just before seeds are planted in spring.

Those interested in the use of Ford Ammonium Sulphate will find many valuable suggestions and directions in the pamphlet issued by the Ford Motor Company on this subject. These can be obtained from any Ford Dealer or will be sent out by Ford News on request.

Of perhaps greater interest to most readers of Ford News are the remarkable results reported on lawns by the Rhode Island Agricul-

tural Experiment Station. This station shows how they have grown continuously weedless lawns for years by the use of a fertilizer in which the nitrogen is in the form of "Ammonium Sulphate." The results speak for themselves.

Two things should, however, be borne in mind regarding this valuable work, first that certain grasses are better adapted for this work and that clovers do not thrive in such a lawn. This, on second thought, is no drawback for who would not rather see a velvety lawn fine-leaved and free from weeds than one with some clover struggling hard to keep up with the plantain and dandelions.

The fertilizer used in this work was Ammonium Sulphate 135 pounds, Acid Phosphate 400 pounds, Muriate of Potash 200 pounds per acre or Ammonium Sulphate three pounds, Acid Phosphate nine pounds, Muriate of Potash four and one-half pounds per thousand square feet. In making this mixture dilute these chemicals with dirt or dried organic matter such as peat before applying. The grasses found best adapted to be grown under annual top dressings of this mixture were Rhode Island bent, redbot, Red Fescue, Creeping Bent. The particular feature in this work on lawns was the development of an acid soil condition which was fatal to weeds but favorable to these grasses. The work of this same station shows also that the soil reaction is vital in all work with Ammonium Sulphate, and lime is in more cases a valuable adjunct to fertilization.

This is the time of the year acknowledged to be the best for renovating an old lawn or making a new one.

City Forester Commends Fordson

Scranton, Pennsylvania—"Hurrah for the Fordson tractor! It surely has saved the lives of thousands of trees this summer." So shouts H. M. Kerber, the city forester of Scranton, Pennsylvania.

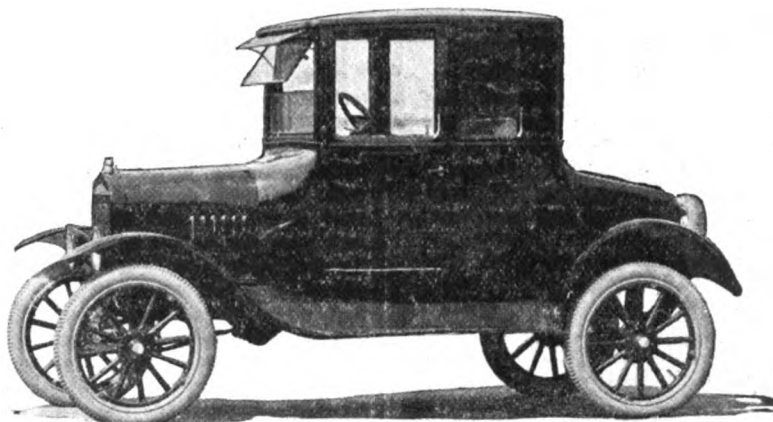
He states that the city obtained a sprayer of the latest type and thought to save money by using a four-horse team for operating it.

Last year the horses sweated through the hilly streets of Scranton and what with stopping to rest them, feed and water them, valuable time was lost, for caterpillars wait for no man. They finally succeeded in doing a pitiful total of 8,000 trees out of 30,000. And the expense of 86 cents an hour per team ran high.

This year, in desperation, they hit upon the tractor idea. Many scoffed and said it could not be done, but in less than six weeks of spraying they have sprayed 20,000 trees at a cost that is unbelievably small.

Changes in All Models Carry Many Refinements

Concluded from page 1



The Ford Coupe.

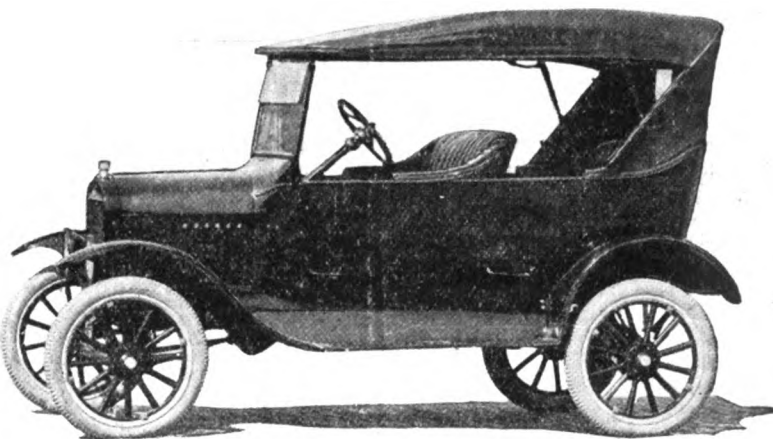
are notable. The rear compartment has been enlarged. The gasoline tank has been placed under the seat, with divided cushions, and permits filling of the tank from the right side. This makes it unnecessary for the driver to leave the car. A ventilator in the cowl and a visor over the windshield add to the comfort and attractiveness of the car. A rear fender of sturdier character also is a feature.

Choice materials have been em-

and roadster runabout, the cowl has been enlarged to flow in a graceful curve to the higher hood.

The changes cause most pleasing effects in all types. The improvement in the touring car made by introducing the one-man top and slanting windshield is greatly enhanced by the larger radiator.

The new radiator also is extended to the Ford truck chassis. No changes in prices are contemplated.



The Ford touring car.

ployed to fit the interior and the arrangement of the deeply cushioned seat is such that at the rear there is a small recess shelf for carrying parcels. The rear vision window is much larger and oblong in shape. Door windows have been equipped with revolving type window regulators and door locks are provided. Side windows are equipped with the lever type window lifters.

Marked, too, is the improvement in the four-door Sedan. Highly popular since its introduction a year ago, because of its low, graceful lines, the car with the changes just made is of even finer lines and sturdier appearance than before. This has been brought about by the installation of an entirely new cowl blending into the larger hood and radiator. It provides greater leg room for those in the front seat.

In the open types, the touring car

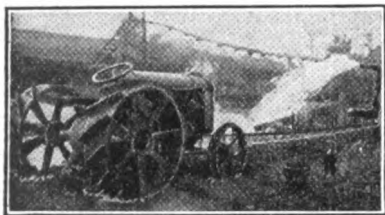
Alaska Concern Orders Fordsons

The master mechanic of the Pinta Bay Mining Company, of Chichagoff, Alaska, has ordered two Fordson tractors. One will be used for power in the sawmill and the other will be used to run the air compressor. Another will be ordered later to run the roll mill and rock crusher. The sawmill equipped with Fordson will cut 7,000 feet of lumber a day. The master mechanic asks that he be kept informed as to the advancement of new equipment from our factories. He knows that it pays to keep in touch with modern methods even though he is in far-off Alaska. Economy is essential in any business, whether it be in the center of population or on the frontier.

Brief News Notes From Here and There in the Ford World

Fordson Tractors Prove Utility in Many and Varied Uses

Norman, Oklahoma—Builders of an artificial lake estimated that it would take not less than six months to construct the lake and at a cost of from \$2,500 to \$3,000. However, in less than two months, 42 acres of this tract of land had been put un-



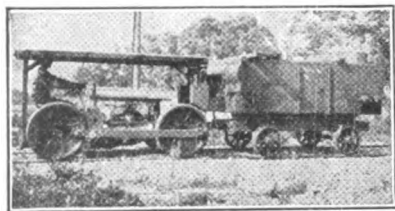
der water, four months having been saved on this work. In addition to furnishing practical demonstrations as to what a Fordson actually would do, the construction of the dam used in connection with this lake has been the means whereby nine tractors have been sold not only by Local Dealers but Dealers adjacent to this town.

Bridge contractors in the Ozark Mountains of Missouri use the Fordson to pump water in connection with bridge construction work. Many contractors engaged in different kinds of work insist on Fordson tractors for their power. They have proved efficient and economical and have made it possible for the contractor using them to bid lower than his competitor.

During the war, hundreds of miniature locomotives were used immediately behind the front lines to haul cars and supplies over the thousands of miles of narrow-gauge track. One objection to these steam locomotives was that they frequently disclosed their position by sending up a shower of sparks or by showing a red glare when the fire-box door was opened, resulting in artillery fire from the enemy.

Our own army seems in a fair way to overcome this objection through use of the Fordson tractor with locomotive attachments.

Owing to its wide commercial and agricultural adaptability, the govern-

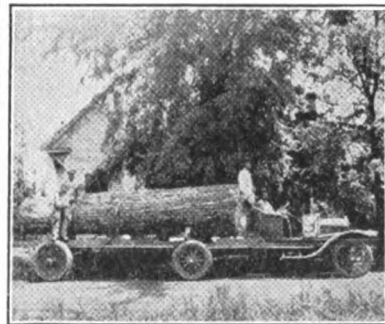


ment would also have available in the Fordson tractor a power plant adequate to meet any emergency.

Alton, Illinois—Mr. William M. Sauvage, formerly mayor, is un-

stinting in his praise of the Fordson tractor. For fifteen years Mr. Sauvage has managed a bathing pool and in that period he has had four different outfits pumping water in connection with the pool operation. He first tried steam, and then electricity. In each case the results were not satisfactory. The last engine he purchased cost him about \$2,500. The high water of last spring flooded the basement of the Hippodrome and a Fordson was put on the job to pump the water out. The results were so satisfactory that Mr. Sauvage decided to put the Fordson to work at the bathing pool. It was installed and now pumps 800 gallons a minute through two four-inch pipes from the river into the pool. If the river comes up, the Fordson moves up the bank a few feet, and if the river goes down the Fordson follows it.

Alto, Texas—Another instance of the durability and efficiency of the Ford truck. This particular truck is carrying a 16-foot oak log 49 inches in diameter and containing 762 feet of lumber. It weighs more than 8,000



Hauling 762 feet of lumber in one log.

pounds. This truck and two others are hauling this timber out of the Angelina bottom eight miles into Alto, and doing it at less than half the cost of the wagon and team rigs.

Springfield, Ohio—An unusual display appeared in the window of Fred Moyer, one of the local Ford Dealers, exhibiting THE TOMB OF THE FAMOUS KING TUT, the skeleton being constructed entirely of Ford parts. The head consisted of a headlight, with eyes and teeth made from other appropriate pieces. Arms, legs, fingers, ribs, and other bony parts also came from the parts department. This attractive display has proved an unusually good advertisement and has caused unusual comment throughout the city. This only proves that the Ford car and parts can be used to describe ancient history as well as making the modern history in the automotive world.

Roof Over Craneway Benefits 10,000 Employees

Stresses Importance of Good Light and Ventilation

Thousands of Feet of Heavy Tarpaulin Protect all Sections Underneath Work

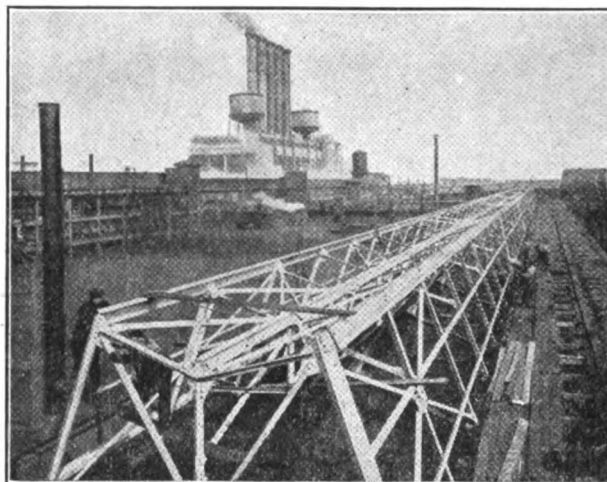
Raising the roof of the C craneway in the Highland Park Plant to supply more light and better ventilation in the adjacent buildings is another illustration of the importance attached to working conditions throughout the Ford Plants.

dents have occurred during the operation.

The C craneway is one of the big steel storing places of the Highland Park Plant.

At the present time (and the amount of stock at hand is greatly below the average), 20,000,000 pounds of bar, sheet and forging steel are stored in the craneway. Of this amount 2,500,000 pounds are daily received and distributed to the various departments.

This enormous amount of steel is handled during 24 hours by two cranes and 27 men.



At left—140,000 pounds of steel ready for rivet gang. A portable jib crane with a hoist was used on this job.

At right—Note Safety methods adopted to protect men underneath job. Thousands of feet of tarpaulin to catch any material that might fall.



The old C craneway with a length of 820 feet, a width of 56 feet and a height of 39 feet, from floor to peak, acted as a natural ventilator for the B, E and G buildings. With the installation of additional furnaces and ovens and the increase of the working force, the renewal of air was not sufficient for the well-being of the employees.

After a number of tests had been made in various parts of the B and E buildings to determine the velocity and direction of air currents, it was decided that raising the roof nine feet would reduce excessive heat near the furnaces, carry away gases and fumes and furnish ample ventilation. Approximately 10,000 men will be benefited by this change. The work of raising the roof is nearly completed and it is worthy of note that no acci-

Fordson Moves 180-Ton House

In Corpus Christi, Texas, a Fordson tractor was used in moving a building weighing 180 tons a distance of nine miles. No other equipment except a winch equipped on the tractor was used in this work and the building was moved without damage. This is a remarkable achievement and one that we may well be proud of. Moving contractors should look into the merits of the Fordson, and Ford Dealers should make an effort to sell such contractors.

No matter how many other qualifications you may have, co-operation must be one of them if you expect to get to the top.—N. C. R. News.

"Safe Production" Motto Throughout Ford Plants

Safety Spirit Pervades Every Department of Organization

"Accidents Are Absolutely Unnecessary," Declares Mr. Ford

Frequent checks by the Safety Department indicate that foremen and department heads pretty generally are familiar with the location of fire extinguishers and their proper use. For the benefit of those who may not be thoroughly familiar we reprint the instructions governing the use of the three types of extinguishers in use:

1. Small pyrene extinguisher for electric fires. It forms a poisonous gas called tetra-chloride, therefore great care must be exercised when using it. The sole reason for its use on this type of fire is that electric current cannot travel back to shock the user.

2. "Foamite" is used on oil and paint fires. It forms a coating over the burning substance which excludes air.

3. The three and one-half gallon soda extinguisher is most commonly used for other fires. It is operated by turning the container upside down.

Instructions are written on each type of extinguisher and all employees should be prepared for an emergency.

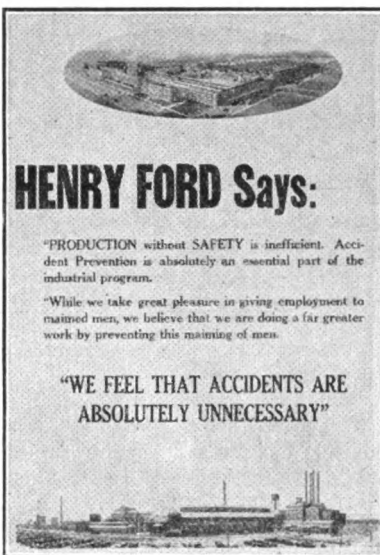
The Cleveland Branch is testing out all fire hose to see if same is in good working order. A special check is being made to see that all coats, caps, and so on, are removed from fire extinguishers. All lights suspended from sprinkler pipes will be removed. It is the strict adherence to all Safety regulations which distinguishes the Ford Plants from many other institutions.

The Des Moines Branch is now issuing a monthly Safety standing bulletin, showing accidents in the various departments.

In the Indianapolis Branch an active campaign is still conducted to weed out burred and mushroomed tools. What is your Branch doing along this line?

Green Island—A stump was recently removed from the top of a ninety-foot pine tree. This stump was blown there some time ago when blasting was done at that location, and was a menace to picknickers.

One of the employees of the above Plant placed his lunch on a 4600-volt transformer, although a railing was around it. To do away with this hazard, additional guards will be installed.



Every Ford employee should read carefully the *Safety Bulletin* reproduced on this page. The message it contains if followed by all concerns would reduce accidents materially.

"Safety" is a first principle in the Ford Plants and the success of the Company's efforts depend largely upon the individual interest taken by each employee in his own Safety and that of his fellow workmen.

Make it part of your job to practice Safety at all times—it increases efficiency.

San Francisco Branch—Upon investigation it was found that stock had been piled too high in basement. Fire regulation provides for an 18-inch clearance for sprinkler system. Repairs to all window brackets are being made. Serious accidents have resulted in some plants due to window brackets not being in good order.

The Fire Department of the Portland Plant will assemble each week for a drill, in order to familiarize themselves with all equipment.

The Sao Paulo Branch recently organized a fire team.

The Houston Branch recently enlarged its Fire and Hygiene Committee. The thoroughness of their Plant inspection is very evident from the following items which appeared in their Safety report.

Item 1—Brace on reservoir loose.
Item 2—Nut on brace that holds flagpole in place loose.

Item 3—All fire valves were tested.

Large fires have been started by tiny sparks and missing small nuts or cotter keys have been the cause of wrecks.

Columbus Branch—Special inspection of tools and fire doors.

Does Safety Pay? Ask the Old Employee; He Knows

Careful Attention to One's Self and Money Leads to Happy Old Age

"Old age isn't so bad," says old Dan as he sits in the evening under the tree in front of his little cottage. "Of course, I can't do as big a day's work as I used to but I still have my eyes, arms and legs, and my health isn't so bad for an old fellow. I'm not a burden on anyone."

"I've worked on all kinds of machinery in my time and never lost a day through an accident. Back in the good old days when no one ever thought of Safety First we had some machines that were regular man killers but I played safe and watched what I was doing. The boys used to kid me and call me an old woman but I thought of Ma and the kids and let them laugh. Some of those guys used to act as proud of their finger stumps as my old dad was of his Civil War medal."

"Well, I've lived long enough to have the laugh on some of those wise birds who thought they could take fool chances and get away with it. There was poor old Hank who used to say that Safety was 'The bunk' and that if you were going to get hurt or killed it was sure to happen and nothing you could do would stop it. One day he had to oil a shaft and the ladder wasn't any too safe. When I told him he'd better fix it he laughed and told me to jump in the lake. Just as Hank got to the top, a rotten rung gave way and he fell and broke his neck. We passed the hat around to dig up money for his funeral expenses and his widow had to take in washing to support herself and the three little kids."

"Things are different at the plant now. We have four times as many men on the pay roll as there were 10 years ago but there aren't half as many getting hurt. The Company spent a lot of money putting guards on all the machines and posting Safety bulletins about the Plant. It also hired a Safety inspector who goes around looking for dangerous spots and urging the boys to work carefully. How

the boys did laugh when the Company first got the idea that it could stop accidents. They know better now. Nobody has lost a day's time in my



Happy Old Age—the reward of Safety.

department through accidents for six months and if some of those green hands we took on yesterday don't spill the beans we'll make it a year.

"I was careful with my money, too. When pay day came around I went to the bank and managed to lay by a little each week. Then one day I had a chance to buy this house and I didn't have any trouble borrowing the money because I had been a steady worker and had shown the Company and the bank that I could save. Ma and I went without a lot of things we wanted to get it paid for, but it's ours now and it will shelter us in our old age. When the Company inaugurated the Ford Investment Plan I began investing regularly and my money and I are working together. I haven't got enough laid by to quit work but as long as I'm able to work I don't want to loaf around and be no use to myself or anyone else."

"Does Safety pay? I'll say it does and so will any of the boys at the Plant. I know the Company has saved a good many dollars. It has saved me many a day's pay and a few doctor bills. Work safely, son, take care of your health and save some of your money and you needn't worry about growing old."

Save the Kiddies

In Massachusetts alone 220 children will be crushed to death beneath the wheels of motor vehicles in 1923, and 5,854 will be maimed or injured. This information, based on statistics, will soon glare at motorists from billboards and signposts throughout the state of Massachusetts, as a part of the Safety campaign put on by the State Safety Council and Roads Federation, in co-operation with Frank A. Goodwin, registrar of motor vehicles.

"Mothers! Help prevent auto accidents. Don't let your children play on the streets," is the warning to be flashed from the posters.

"Henry" Furnace, Rouge, Breaks Record

The "Henry" Furnace at the River Rouge Plant of the Ford Motor Company set a new tonnage figure during the month of July.

The average daily tonnage was 551, with a consumption of 1,866 pounds of coke per ton of iron produced, the average silicon being 3.11 per cent.

This furnace is now on the fourth year, having produced approximately 568,040 tons of foundry iron with silicon between 3.00 per cent and

Future Programs Station WWI

September 12, 1923.

Commencing at 8 p. m.

Wave Length 273 meters.

Orchestra Selection—*Melodie*, Massenet, Opus 10: by River Rouge Orchestra.
Baritone Solos—*Gipsy John* (Charles Clay); *Brown October Ale*, from Robin Hood, by Mr. William Metzger, accompanied by Mrs. Metzger at the piano.

Hungarian Flute Solo—*Hungarian Melodies*, by Mr. E. J. Farkas.

Vocal Solos—*I Love You Truly* (Carrie Jacobs Bond); *Crying for You*: by Miss Irene McCrie, accompanied by Mrs. Lois Duford at the piano.

Orchestra Selections—*Barney Google*; *Yes, We Have No Bananas*: by River Rouge Orchestra.

Health Talk No. 74—"The Fundamental Medical Sciences," Dr. J. K. Ormond, Surgical Department, Henry Ford Hospital.

Baritone Solos—*Bid Me To Love* (Hatton); *Ah, 'Tis a Dream* (Hawley): by Mr. William Metzger, accompanied by Mrs. Metzger at the piano.

Hungarian Flute Solos—*Southern Melodies*: by Mr. E. J. Farkas.

Violin Solo—*Selected*: by Carl Voelkner.

Vocal Solos—*Just a-Wearyin' for You* (Carrie Jacobs Bond); *Days of a Short While Ago* (E. P. Wormack): by Miss Irene McCrie, accompanied by Mrs. Lois Duford.

Piano Solo—*Selected*: by A. D. Gentile.

Hungarian Flute Solo—*Mighty Lak a Rose*: by Mr. E. J. Farkas.

Baritone Solos—*Dream* (Bartlett); *At Dawning* (Cadman): by Mr. William Metzger, accompanied by Mrs. Lois Duford.

Orchestra Selections—*Dreamy Melody*, Valse Lento: by River Rouge Orchestra.

September 19, 1923.

Commencing at 8 p. m.

Wave Length, 275 Meters.

Piano Solo—*A Caprice Viennoise* (Kreisler) Miss Doris Howenstine.

Baritone Solos—*On the Road to Mandalay* (Duna), Mr. Sid Parker, accompanied by Miss Winnie Wilson.

Violin Duet—*La Cinquantaine* (Gabriel-Marie), Mr. Herbert Edwards and Mr. David Parks, accompanied by Miss Doris Edwards at the piano.

Violin Solo—*Adoration* (Borowski), Mr. Herbert Edwards, accompanied by Miss Doris Edwards at the piano.

Flute Solos—*La Traviata* (W. Popp), Concert Waltz, Opus 378; *Berceuse* (F. Doppler), Mr. Edwin Lennig.

Soprano Solos—*Kashmiri Song* (Finden); *I Hear You Calling Me* (Marshall); Miss Gladys Howenstine, accompanied by her sister, Miss Doris Howenstine at the piano.

Health Talk No. 75—*Insect Bites*, Dr. J. P. Pratt, Assistant Surgeon-in-Chief, Henry Ford Hospital.

Piano Solo—*Polichinelle* (Rachmannoff), Miss Doris Edwards.

Baritone Solos—*The Banjo Song*; *Smilin' Through*, Mr. Sid Parker, accompanied by Miss Winnie Wilson at the piano.

Flute Solo—*L'Esperanza* (A. Terschack), Mr. Edwin Lennig.

Violin Duet—*Barcarolle* (Chas. Dancla), Mr. Herbert Edwards and Mr. David Parks, accompanied by Miss Doris Edwards at the piano.

Violin Solo—*Selected*, Mr. David Parks, accompanied by Miss Doris Edwards at the piano.

Soprano Solos—*They Call Me Mimi*, from opera *La Boheme* (Puccini); *Cansone* (Josten), Miss Gladys Howenstine, accompanied by her sister, Miss Doris Howenstine at the piano.

Piano Solo—*Valse Poetique* (Sriml), Miss Doris Howenstine.

Fordson Shows Merits to Packers

So convincing were the trial tests made of the Fordson tractor to representatives of Swift & Company, packing-house concern of St. Joseph, Missouri, that they ordered from the Grant Motor Company two of them for use in the yards of the company. These two tractors are taking the place of nine horses, saving much time and expense. The handsome gray Percheron draft horses are no longer seen pulling their loads about the premises. Economy has overruled beauty, and only two horses are kept on the hauling job at this plant. Fordsons have been ordered for these remaining hauling jobs and the horses will soon be entirely replaced by tractors.

Fordson Essays Win School Prizes

"Fordson Farming" has become a very popular subject for essay contests in the public schools throughout the country. Pupils have written some commendable papers, in which they display an excellent knowledge and understanding of their topic.

Miss Lora Wade, a member of the sixth grade of a Texas school, writes in her essay that "there are millions of things a Fordson can do, and does not burn as much kerosene as a horse chews food. It will not get scared and run away, and does not seem to mind the weather, either. It can plow, plant cotton, gin cotton, haul anything, do all kinds of mowing, binding and dairy work—all except eating the butter and drinking the milk. It runs threshers, pumps water, drills wells, pulls posts, digs peanuts and moves snow 'rite' off the roads. It is useful to the woman as it runs the washing machine, and a favorite of the children because it runs the 'mary-go-round' and the 'Ferris wheel.'"

Spence Chambers, in the ninth grade of another Texas school, states that "from the boys' viewpoint, to say nothing of the increase in profits, the Fordson would add a new interest to farm life."

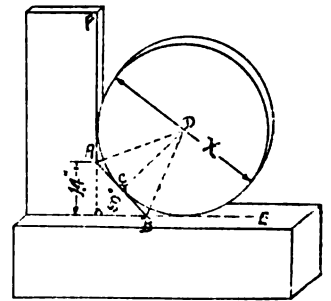
Miss Jewel Carpenter, whose essay won first prize in a contest held by a southern school, concluded in this manner: "Prosperity seems to follow the Fordson farmer . . . Every progressive farmer should own a tractor and increase his income so he can independently feed, clothe, and educate his children."

Problems

If there are explanations or comments regarding problems, write the Henry Ford Trade School, Ford Motor Company, Detroit, Michigan.

No. 66

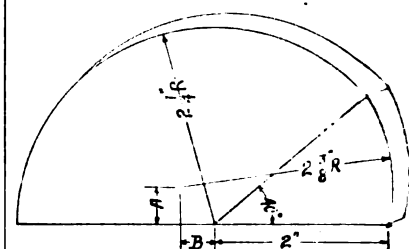
The following drawing has been purposely distorted to bring out details.



DETERMINE x .
 $AB = 1.4 / (\cos 50^\circ) = 1.6275$
 $\angle ABE = 180 - 50 = 130^\circ$
 $\angle ABD = 130 \div 2 = 65^\circ$
 $\angle FAB = 180 - 40 = 140^\circ$
 $\angle BAD = 140 \div 2 = 70^\circ$
 $CD = AB \div (\cot \angle ABD + \cot \angle BAD) = 2.201$
 $x = 2(CD) = 4.4022$

Try This

No. 67



DETERMINE A AND B .

If you intend to go to work there is no better place than right where you are; if you do not intend to go to work you cannot get along anywhere. Squirming and crawling about from place to place can do no good.

—Abraham Lincoln.

"He has a great faculty for putting the cart before the horse."

"Oh, I wouldn't say that; say he has a habit of trying to make the wheels run the machine."

It was a hot sultry day in a great city. Seven cars were lined up in front of a busy filling station. Third from the end stood a leaking, steaming, rattling little five-passenger. In due time the line dwindled and the little five-passenger found itself parallel with the gas pipe.

"How many?" the man asked impatiently.

"One," answered the owner with the air of a Rockefeller.

"One? What cha' tryin' to do? Wean it?"—Judge.

Do the thing which is best for everybody, and it will be the best for you in the end.—Henry Ford.

FORD IDEALS



This volume of 452 pages, durably bound, contains 98 articles which have appeared as Mr. Ford's Page in THE DEARBORN INDEPENDENT. These articles deal with industrial, social and economic problems. They are inspirational and informative.

\$1.00 a Copy, Postpaid

Ford News

Volume III. L

Dearborn, Mich., September 15, 1923

No. 22

Lincoln Addition Effects Many Changes in Plant

Departments Laid Out for Progressive Assembly

311,000 Square Feet Added to Floor Space; Conveyor Systems Installed

At the Lincoln Plant of the Ford Motor Company a new order in motor car production has come into effect with the completion of the huge new addition to the building. The various mechanical departments have been rearranged and laid out so that all operations have an absolute logical progression, thus raising the work to a high degree of efficiency and economy.

Only a few weeks ago the immense addition to the Lincoln Plant was merely a framework of steel.

This building which has so suddenly sprung to life adds a total of 1,552 feet to the length of the original factory, and has a width of 250 feet. The actual increase in floor space is 311,000 square feet. Steel consumption amounted to 2,200 tons.

The new structure reveals the most recent developments and features in modern construction. The

Concluded on page 5

Prize in Essay Contest Is Awarded

Many Papers of Merit Are Received by Ford News

Foundry at Rouge Plant Full of Interest; Offers Wide Field for Description

Selecting the best contribution from the many entries received in the River Rouge Foundry Essay Contest, which closed September 1, was not an easy task. Three judges passed on these essays, each using a one-hundred point score, making the total three hundred points as the basis of decision. The first judge graded the essays from the viewpoint of accuracy of facts; the second, that of general composition and literary merit, and the third, that of punctuation, grammar, neatness, spelling and general make-up. The essay submitted by Mr. F. C. Riecks, Badge No. 90, Accounting Department, River Rouge Plant, was judged best, winning the

Song Writers Attention!

Radio Station WWI, Ford Motor Company, Dearborn, Michigan, will be pleased to consider original song compositions by Company employees for broadcasting.

To the many talented song writers this announcement will afford an opportunity to receive a public hearing of their work.

Words should be accompanied by music but when lyric only is submitted the radio department will endeavor to have appropriate music arranged.

award of one hundred dollars by a score of 280. He was closely contested by a number of others whose merits were commendable. Any entrant desiring to know his grade may learn it by addressing his inquiry to Ford News, Dearborn, Michigan.

Mr. Riecks' essay follows:

The Foundry of the past, in which practically all operations were performed by manual labor, has been replaced by the modern foundry in which the contrast closely resembles the comparison between the modern machine shop and the drill press and lathe machine shops of fifteen years ago. This condition has arisen primarily from the enormous demand

Concluded on page 8

Ford Industries Exemplified at Fair

Elaborate Educational Exhibit Attracted Thousands

Company Set Up Miniature Plants Graphically Showing Successive Manufacturing Steps

Entering the gigantic entrance arch to the Ford Motor Company's 1923 exhibit at the recent Michigan State Fair, visitors found themselves gazing upon five huge flag-bedecked tents situated over an area of thirteen acres.

A great mural landscape called the "Transformation of Materials," at the entrance, sounded the keynote for what was to be seen within. Inside the arch a series of beautiful and highly colored murals depicted various steps in industrial processes: the blacksmith of three centuries ago with his crude forge and anvil; the miner hauling coal on a rude mine sled; the foundryman of olden days pouring molten iron into rough molds, and many others.

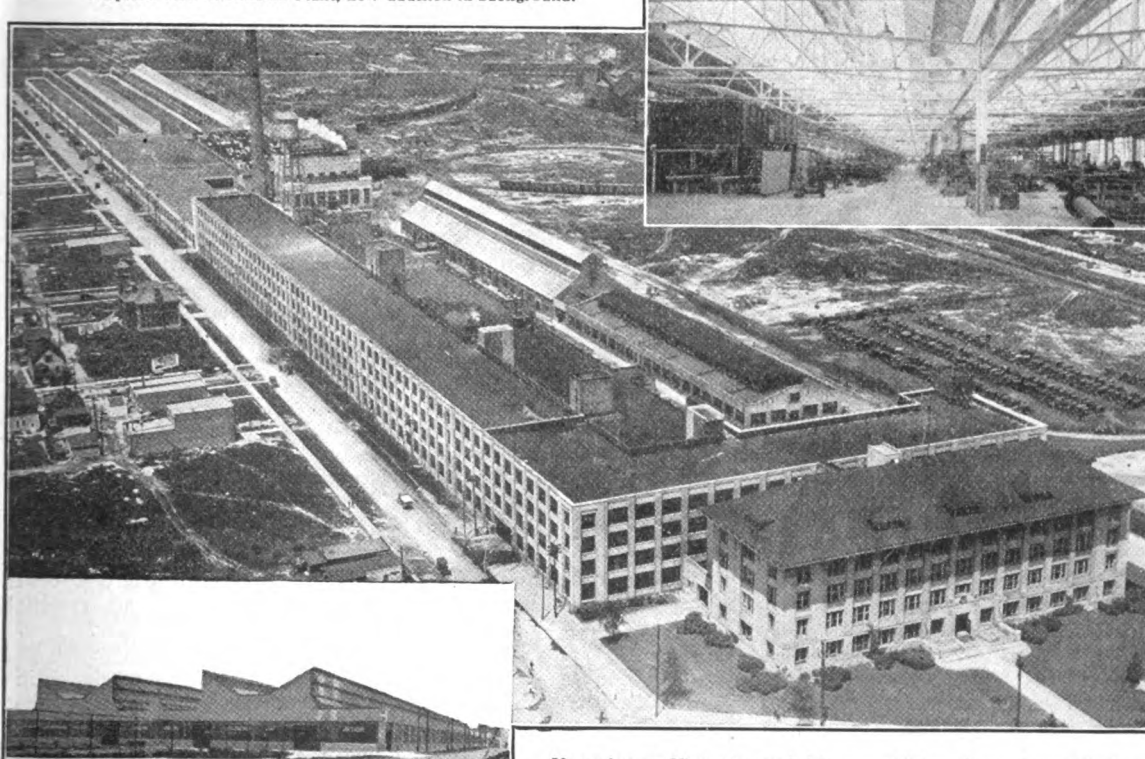
Beyond this, the long files of spectators progressed along the tent aisles, where they viewed the numerous processes that have made the Ford Motor Company famous for its accomplishments in the field of quantity production and efficiency. The entire exhibit was educational in its

Concluded on page 4

Motor Car Output Continues Firm

During the month of August the Domestic and Foreign Assembly Plants of the Ford Motor Company, including Walkerville, Canada, turned out a total of 186,268 Ford cars and trucks, a substantial increase over the production for the preceding month. This mark was reached despite the fact that not only in the Home Plants but also in the twenty-eight assembly plants throughout the country, changes were being made in machinery as well as manufacturing operations preparatory to the introduction of the new models. For the week ending September 4, a five-day week, Labor Day being included, the output of the company's Domestic Plants was 33,465 cars and trucks, 1,706 Fordson tractors and 176 Lincolns.

Airplane view of Lincoln Plant, new addition in background.



Upper insert—View of central aisle, new addition. Lower insert—End view of new addition.

Ford News

ESTABLISHED 1926

Issued for the employees of the
various Ford Interests.

Vol. III, No. 4

September 22, 1925

PUBLISHED SEMI-MONTHLY

Motto

Radicals and Conservatives, who are markedly such, constitute small portions of the nation and check each other. They are, as it were, the advance guard and the rear guard of progress. Radicalism is wrong when it is jealous and Conservatism is wrong when it is greedy. No one will say that to challenge the injustices of the present system is wrong, and no one will say that to defend established injustice because it is established is right. Society itself is neither Conservative nor Radical—it just grows along, with enough of radicalism to keep it going and enough of conservatism to prevent it from becoming a monstrosity. If these two parties could realize their relative smallness and study their social functions, they would see that progress does not depend on converting the world to either point of view.

A New Angle—Written From Experience

Without considering the effect of the use of tobacco on the individual, and the most ardent smoker or chewer will admit it is injurious, there is a phase of the habit we may well consider, and that is to what extent it may be a nuisance to others than the users. The necessity of spitting in connection with chewing is positively dirty and is not tolerated in refined society anywhere. The prohibition seen in street cars, in the theaters, on the streets, on trains and in many similar places "Spitting Forbidden" speaks for itself.

The Ford industries have succeeded in eliminating the habit of smoking on the premises. Pipe, cigar and cigar smokers more or less cheerfully forego smoking while on duty. To take the word of one of them, he has found the change beneficial to physical health and a decided benefit to the pocketbook.

Many who admit the danger of indiscriminate smoking in factories and places of business do not consider the habit of chewing offensive or wasteful. The expense to the Ford industries for paper cuspidors reached the enormous total of \$27,000 annually, and the cost of maintaining them and cleaning the floors about them amounts to as much more as nearly as can be reckoned. Is there a Ford man who lacks the pride and self-control needed to see

that his self-indulgence shall not entail such waste?

With the erection of new and beautified manufacturing plants, model in all their appointments, comes the increased problem of keeping them clean. Such a condition cannot prevail where floors and walls are disfigured with tobacco juice. You never find a person who chews tobacco spitting on the floor or walls in his own home.

Unlike smoking, chewing has never been banned in the Ford organization but why not begin now and show the world that Ford men do not need to be told they must not do a thing that any reasonable man realizes should not be done?

This appeal is to the manhood of Ford employees. It does not take into consideration the effect of the use of tobacco, a rank poison, or the individual. This is written by a user of the weed, but one who has accepted the self-imposed task of relieving his employer of the necessity of asking him not to defile the premises in which he finds pleasant and profitable employment.

M. T. W.

The Modern Miracle

I was conceived in the minds of men who lived before their time. I came into being not as a child does, perfect of form and lacking only growth—but crude and ugly, ill-shaped in every part. Yet in me was crystallized the germ of an idea—the vision of a greater victory for man over the elements of time and space.

My creators passed on, but their vision lived for other men to see and to expand. And I have grown.

Out of the bowels of the earth is mined the stuff of which I am built. Metals are conjured with to give me untold strength. To make me, man humbles the monarchs of proud forests and wrings from age-old rocks their richest ores. And from tropic lands ships bring the cushioned tread on which I ride.

As I have grown in my capacity to serve, so have I acquired beauty and dignity. All that men know of science and of art today is invested in me. The keenest minds on earth are focused on me, that tomorrow I may advance nearer to perfection.

My career has been short as men measure time—yet I have changed the history of nations.

I have carried the city into the country and the country into the city.

I have broken down barriers and built up friendships.

I have released millions from the slavery of dwelling in remote places and have given them the freedom of the unending highway.

I have introduced civilization into dark corners of the world. I have quickened and broadened the progress of commerce and industry.

I began life as a plaything for the rich, but have become a utility at the service of all people.

I am a living monument to imaginative achievement.

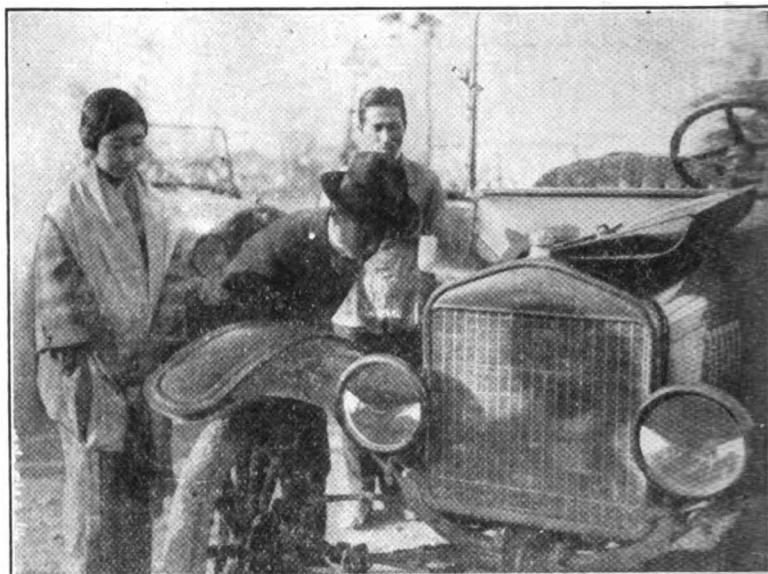
I am a symbol of modernity.

I am the motor car.

(By John Chapman Hilder in *Elks' Magazine*.)

Automotive Transportation in Japan Gains Popularity

Island Nation Foremost Exponent of Motor Cars in Orient



The late Prince Yamashina inspecting a Ford touring model.

The recent cataclysm which befell Japan is one which has brought forth the whole world's heartfelt sympathy.

Japan, representing one of the oldest civilizations, always has held an outstanding position as a progressive nation. Evidence of this is borne out by Japan's rapid acceptance of the motor car, and especially by the increasing popularity recently shown.

The automotive industry has lost an ardent supporter in the

untimely death of Prince Yamashina, head of Japan's Imperial family. He had always manifested a profound interest in things mechanical, and particularly in the motor car. He saw the automobile as a cheap and efficient form of transportation, which is the lifeblood of a nation.

Japan, characteristically sturdy, already has started to rebuild her devastated cities and waysides. The world stands with her in her trial.

Pithy Paragraphs

To win over a customer is more useful than putting over a sale.

Usually, the longer it takes you to "arrive," the longer you are likely to stay.

One inalienable right: The right to do right.

Learn to learn from others.

There is not one man in a thousand capable of being a successful rogue, while anyone may succeed as an honest man.—*E. W. Howe*.

The busy man has few idle visitors; to the boiling pot the flies come not.—*Benjamin Franklin*.

To become a supervisor, need no supervising.

Be on the outs with everybody and you'll soon find yourself on the outside of the gate.

One ounce of imagination is worth a ton of influence.

We take out of the world nothing outside of our skins. Look well to what you put into yourself, into your mind.

If you know your work thoroughly and are willing to keep at it steadfastly, it is impossible for you to fail.—*Forward*.

Automobiles that are not self-starters are out of date. So are employees.—*Forbes*.

Trim your lamp so that it will give more light and less smoke, and carry it in front so that your shadow will fall behind you.—*Henry Van Dyke*.

Physical exercise produces deep breathing; mental exercise develops deep thinking. Both are essential to Success.—*P. A. Pflueger*.

As in a game of cards, so in the game of life, we must play what is dealt to us; and the glory consists not so much in winning as in playing a poor hand well.—*Josh Billings*.

Ford Motor Company's Artificial Leather Requirements Supplied by Own Plant; 50,000 Yards Daily Capacity; Safety Measures Important

Five years ago the manufacture of Ford Artificial Leather was in its purely experimental stage. Three men labored patiently, mixing variously composed and proportioned compounds, and applying them by hand to cloth surfaces; the coated surfaces were dried by air.

By December, 1918, an oven, comprised of a coating chamber and a steam-drying apparatus, had been built, and a Sheridan embossing press installed, operated by a force of seven men.

The cloth used as a base must be coated from three to ten times, according to the use for which the finished product is destined; and each coat must be thoroughly dry before another is applied. To overcome the delay involved in passing material repeatedly through a single

The principal cloths used in the manufacture of Ford Artificial Leather are drill, twill, moleskin, sateen and Ford Cloth, which is

running into troughs below, to be pumped back to the supply tanks. The first coat is designed to fit the surface of each variety of cloth to re-

"re-rolling stand," the strip is parted from its successor and weighed to "check" the amount of mixture used in coating it. Following this, it is mounted on a "releasing stand" before an embossing press, in which it is to receive the characteristic surface lines of the leather it imitates.

The Sheridan press first installed by the department has an embossing pressure of 400-500 tons, and embosses 24 inches of leather at a single vertical stroke; the remaining two have a pressure of 600-700 tons each, and emboss 45 inches of leather each with a single stroke. The capacity of the first is 2,200 yards, and that of each of the others 3,200 yards, in an eight-hour day. The rotary presses in the new section are of approximately the same capacities as the larger Sheridans.

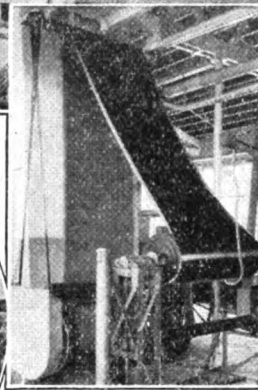
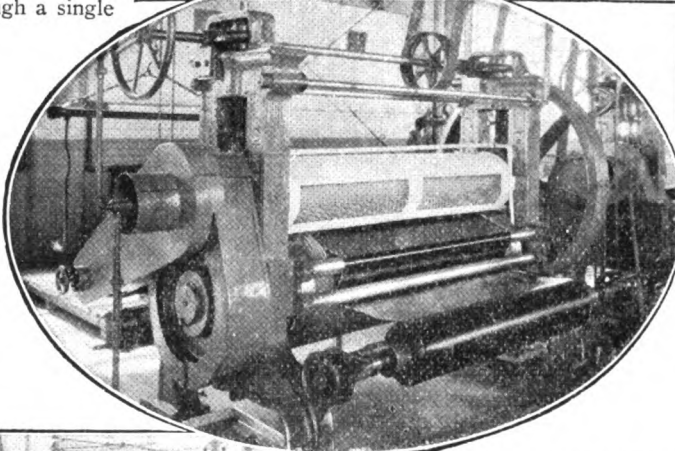
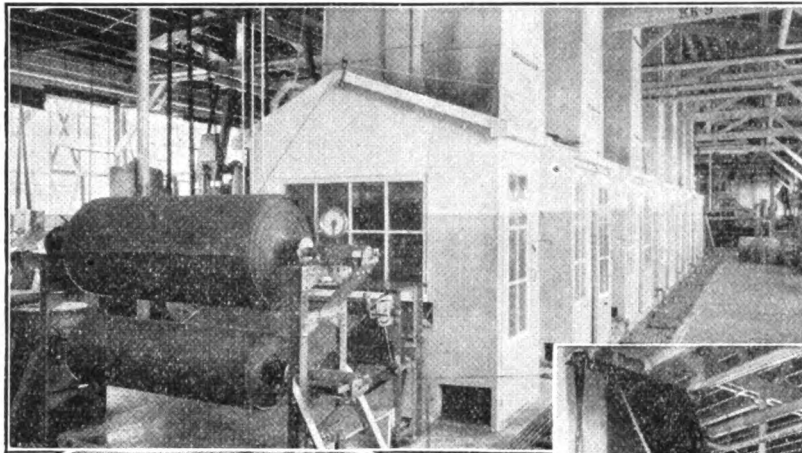
To furnish the heat necessary to imprint a perfect pattern on the leather under treatment, pipes in which steam is circulated at 230 degrees F. are present beneath the embossing platforms of the Sheridan presses. The embossing plates used in the Sheridan presses contain exact reproductions, in metal, of the surface lines of leather itself, procured by the etching process. The rotary patterns aim merely at producing the general—or conventional—appearance of the original leather.

From the embossing press the leather goes to the last oven, where it receives its finish or luster coat; and thence to a final inspection, with which the manufacturing process is concluded.

Five grades of leather, each suited to a different purpose, are manufactured in the department. With the five grades the Ford Company is able to supply, wholly or in large part, its own side quarters, side curtains, back curtains, cushions, cushion facings, tops, Sedan tops and backs.

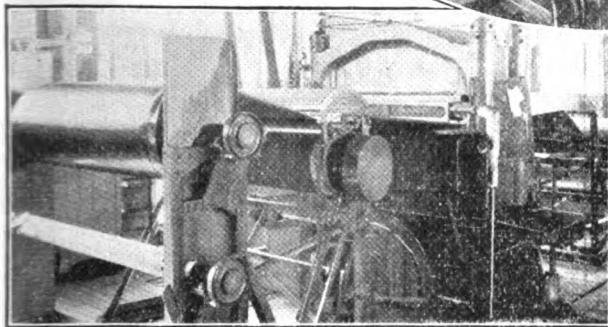
Owing to the volatile and explosive character of certain ingredients used in manufacture, elaborate Safety precautions are taken at the Ford Artificial Leather Plant. The ovens, where an estimated seventy per cent of the mixture evaporates, are fitted with asbestos doors. Rollers and drums are frequently cleaned to prevent any portion of the mixture drying there—afterward, perhaps, to result in dangerous friction. Air switches and air motors are used throughout the Plant. All lights are mounted outside the windows. Lastly, the dangerous ingredients referred to are stored in underground tanks at a safe distance from the Plant, from which they may however be pumped in, as needed, merely by touching an air switch beside the larger mixing tanks.

The problem of reclaiming the gases that result from evaporation—at once a source of danger and an economic loss—is being vigorously attacked at the Ford Artificial



Center—One of the rotary embossing presses in the new section. Lower roller made of many thicknesses of paper.

Upper—The battery of seven ovens in operation. Releasing stand in foreground; lower roll being fed into ovens, upper roll in reserve. Dial tension indicator visible at upper right of releasing stand. Windows mark coating chambers; elevated portions inclose drying apparatus. Insert—Rewinding stand in operation. Difference in appearance between coated and uncoated material is clearly brought out in these photographs. Lower Sheridan vertical embossing press. Between releasing stand in left foreground and press in background is an ingenious measuring device designed by a Ford employee.



woven in "A" Building, at the Highland Park Plant. The average length of a strip is about 500 yards; the widths run from 36 to 52 inches; the weights from 200 to 500

pounds to the roll. Each roll of cloth is placed on an inspection table and carefully inspected for faults in seam or texture.

The inspected roll is mounted on a "releasing stand" at the head of a battery of ovens. From here the strip is carried through the ovens, and is taken up on a "re-rolling stand" at the farther end. During its passage the cloth is held at a tension by an attachment forming part of the "releasing stand." The tension is varied according to the thickness of the coat desired on the finished product.

In 1920 a new section was added and equipped with two batteries of four ovens each, a mixing apparatus, and four rotary embossing presses; and so, with certain improvements in detail, the Plant stands today.

In the coating chambers the mixture flows onto the surface of the moving cloth, over which it is evenly distributed by spreading knives adjusted in conjunction with the tension control, the surplus mixture

ceives the coats that follow; so its proportions vary according to the texture of the surface under treatment at any particular time. This necessitates its being mixed alone in a small mixing tank beside the first coating chamber. The mixture used for the remaining coats—which remain constant—is made up in larger tanks, equipped with worm agitators. It is pumped to a common supply tank suspended above the floor, and afterward carried by gravity to the coating chambers. Approximately 2,100 gallons of mixture are required to supply seven ovens during an eight-hour shift.

Leaving the coating chamber, the cloth strip moves sharply upward, passes between metal walls over a roller some thirty feet from the floor, and returns to its former level. In the angle formed by its upward and downward passage, live steam—at 210 degrees F.—circulating in a system of pipes beneath the lower metal wall, supplies heat sufficient to dry the strip completely, so that it is ready, on descending, to enter the coating chamber immediately beyond.

When a full roll of cloth—the upper side of which is now hidden beneath a black and glossy, but flexible, coat—has been taken up on the

purpose, and to carry this out all processes were presented in a progressive order and plainly illustrated.

Rows of graphic paintings placed along the centers of two of the larger tents divided them into two parts. These pictures, pertaining to the displays behind which they were placed, assisted the spectators in visualizing the extent of the industry. Some of the paintings were scenic, portraying the Ford forests in Northern Michigan, the coal mines in Kentucky, descriptive of scenes throughout the plants, and many others. Notable among these were the immense panoramas of the Highland Park, the River Rouge and the Lincoln plants.

In the wood section, it was shown how a Ford Sedan frame is evolved from two unskinned maple logs. After this transformation, it was next seen how the limbs of trees are utilized to secure by-products through the process of distillation. There are many blocks and chips, odds and

Ford Industries Exemplified at Michigan State Fair

Continued from page 1

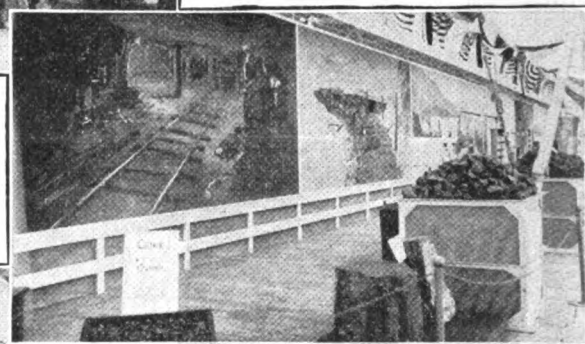
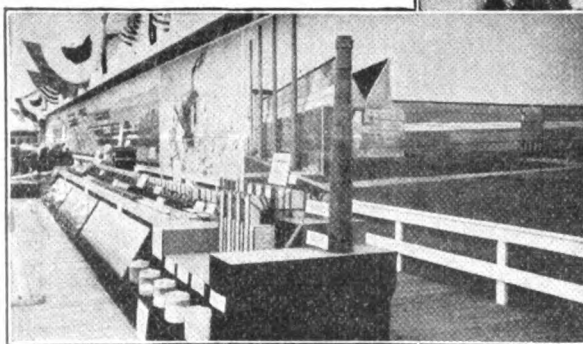
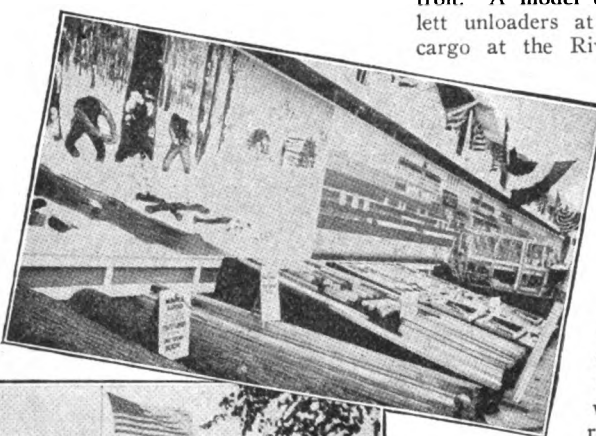
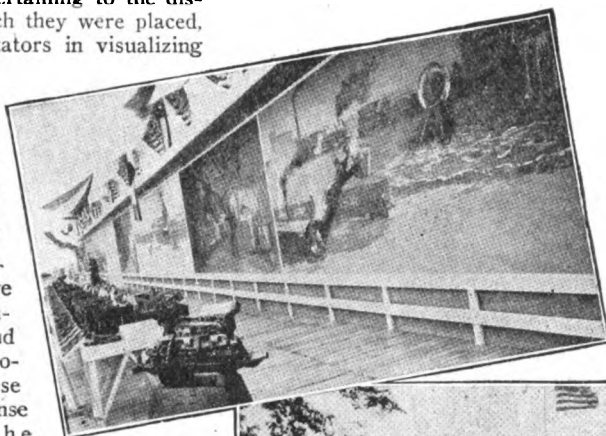
pounds of tar, 25 pounds of ammonium sulphate, two gallons of benzol and 11,000 cubic feet of gas. About half of the gas is used to heat the River Rouge coke furnaces, while the other half is sold to the city of Detroit. A model of the famous Huletts unloaders at work on a ship's cargo at the River Rouge docking slip was shown.

Photographs and exhibits of growing plants pointed out the value of employing ammonium sulphate as a fertilizer.

Probably one of the most interesting features of the entire show was found in the section which showed a series of forty-seven different Model T

motors undergoing the various operations that convert them from rough molds to the assembled power unit. This made it plain that the manufacture of more than seven thousand such motors daily is not so much a matter of speed as of organized efficiency.

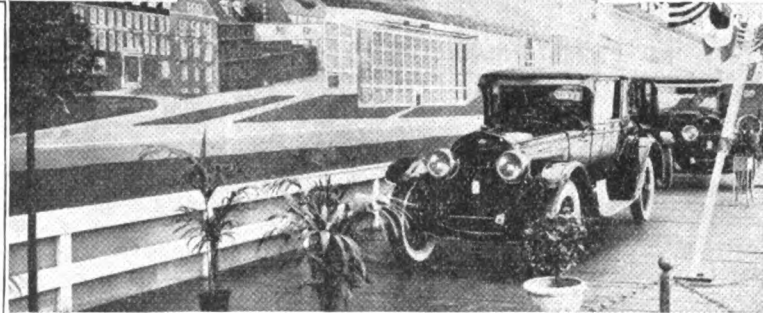
The processes used in glass making became plain to those who surveyed



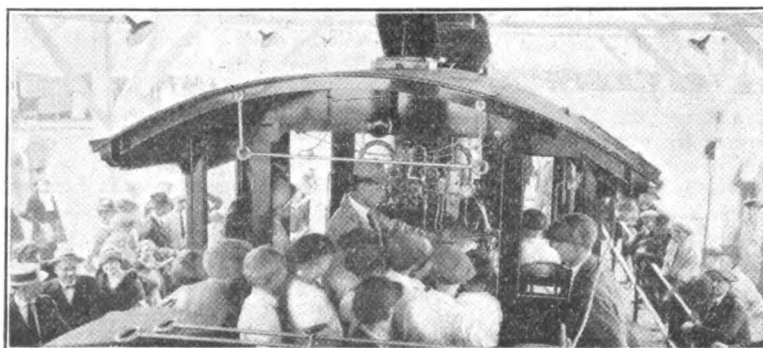
ends, of wood that cannot be directly used, and it was explained how these cast-off pieces are ground up, boiled with chemicals and made into cardboard boxes.

The "story of coal and its products" demonstrated how coal is refined into coke, tar, ammonium sulphate, benzol and illuminating gas. A wonderful miniature model of the great crusher that is used at the River Rouge Plant to pulverize bituminous coal was one of the outstanding features of this section. Next to this was shown in cross-section the intricacies of the furnace in which the pulverized coal is treated and turned to coke; next the coke quenching vat and then a gas cooler with a vat at the bottom to catch the tar that is precipitated from the gas. The model further showed the tank to which the gas passes from the actual refinement for removal of the ammonium sulphate from the "sludge." Following this was a model illustrating the process for the removal and refinement of light oils and the production of benzol and illuminating gas.

Visitors learned that by the foregoing processes each ton of coal is turned into 1,600 pounds of coke, 75



Upper left—Showing various operations on Model T motor; finished motor in foreground. Upper right—Body manufacture; painting in background depicting lumbering. Upper center—Entrance to exhibit. Lower left—Miniature glass plant. Lower right—Beginning of the coal and by-product display. Lower center—Display of Lincoln models.



Giving the kiddies a thrill.

the extensive cross-section miniature of the River Rouge glass factory.

The exhibit of Ford cars and Fordson tractors next came into view, the new models of the former attracting especial attention.

Right across the way from this were the Lincoln motor cars, displayed in eight different models.

A step from this was a tent devoted to The Dearborn Independent and serving also as a rest room, one of the few on the fair grounds. Close by was the pavilion occupied by the Ford Motor Company Band, whose selections were audible throughout the campus.

Next to this a motion picture show, under direction of the Ford Motion Picture Laboratories, was in progress. The program comprised nine feature reels, including the recent releases, "The Ford Age," and "The Golden Opportunity."

The exhibit in the next tent was divided between the Ford Trade School and the Henry Ford Hospital. The former presented a large collection of samples of the pupils' work which would have done credit to professional craftsmen. The Hospital exhibit was notable for its in-

Lincoln Plant Addition

Concluded from page 1

first impression of the interior, after the magnitude of its proportions, is of the brightness and airiness which are so important to the welfare of the workmen and to plant production. The roof and ventilators are specially designed and constructed so as to give thorough and scientific ventilation to the entire building. The ventilators are of the most modern kind, the entire system being electrically operated by three controls. Four degrees of ventilation are possible.

The large capacity of the addition renders it capable of holding a seemingly endless number of departments. An attractive employment office has been put in facing Livernois avenue, and next to this are spacious hospital quarters. Joined to these also is a room for the assistant cashier, which somewhat resembles a corner of a bank.

Located along the sides of the

Since the purchase, February 4, 1922, of the Lincoln Motor Company by the Ford interests many changes have been effected with the introduction of Ford methods.

The first month under Ford management the output more than trebled and by the end of 1922, there had been shipped 5,242 cars. Thus far this year more than 5,273 Lincolns have been manufactured.

All previous Lincoln production records were broken when 897 Lincoln cars were shipped during August. This broke the previous record of 800 Lincolns shipped in July. The August record was made in spite of the handicap of continued moving into the new building without interruption.

new factory are eight soda-water pits, which supply the numerous drilling and cutting tools with cutting compound. Formerly each tool or machine, of which there were about 1,500, had its own individual tank and pump of this cutting compound, but the eight large vats, each containing 4,320 gallons, with an overhead piping system, have replaced all of these, affording a saving in cost and increased convenience. The compound, after being used on a machine, flows back to its reservoir, where it is filtered and used again. The pits themselves are sterilized weekly.

The production stock section is situated at about the center of the addition, where it is within easy reach of every department. It is so large that it greatly resembles an automobile accessory store. The clocks used on Lincoln cars are tested here for eight days before being released.

When a manufacturing plant is carrying on heavy production, it is a

matter of considerable difficulty to move a large part of its machinery out of one place into another. Yet this is exactly what is being done at the Lincoln Plant, with an unhalting output. A large proportion of the departments and machines have been transposed to their new locations, and have been distributed in a very scientific arrangement. Briefly, the plan is that raw material and stock shall enter the receiving room at one end of the new building and pass steadily down until it leaves the shipping room as completed products. Thus the elementary divisions receive the rough stock, perform their particular operations, and pass the work on to the next division in line, and so on. For example, the division making connecting rods sends these directly on where they are immediately used by the next division, which makes the crank shafts.

The famous conveyor systems of the other Ford Motor Company factories are being instituted at the Lincoln Plant. Two-line bench conveyors, taking the place of the present bench work on the heavy cylinder blocks and heads, will reduce cartage to practically nothing, and keep everything on the move during the several operations on the cylinder pieces. On bench work, one man usually performed the complete work on one of these blocks, but under the conveyor system workmen are assigned to particular portions, such as top, sides, and so on, which work he does as the conveyor carries the piece slowly by him. In this way the men become unusually proficient at their particular job, with a consequent increase in speed eliminating two or three hands. There are 3,059 men now employed at the Lincoln Plant.

Improvements are being made to the machinery as it is moved, and considerable new equipment has been added. As an example, one division now has eighty-three automatic screw machines, twenty-eight more than it had formerly.

Being in a subdivision of the city, the Lincoln Plant has constructed its own sewer system for drainage. A fine concrete highway, eighteen to twenty-three feet wide, is being laid, and encircles the addition. The entire property is under the supervision of the Company's own fire department.

Farmer Pat Wallace, of Casa Grande, Arizona, irritated beyond endurance by the depredations of hundreds of rabbits from the desert country, hit upon a very effective method of eradication. He takes his automobile out on a freshly mowed alfalfa field at night and while an assistant drives the machine slowly, Wallace uses his shotgun on the jack rabbits that are caught in the glare of the headlights and spotlight. One night's hunting gave a bag of sixty-seven rabbits and another of fifty-five. This is a good tip for other ranchers.

Radio Devotees Praise Programs From WWI

Many letters and cards from WWI's invisible audience who tune in regularly every Wednesday evening afford ample proof of the carrying qualities of the station.

"I listened to your program," writes J. W. Newburgh, of Dubuque, Iowa, "and it came in very loud."

This evening, for the first time, WWI broadcast selections sung in French. Monsieur Leo de Lorme, accompanied by Mademoiselle Lucienne Carron at the piano, charmed radio devotees with his delightful baritone selections, all but two of which were sung in French.



Upper left—Miss Mildred I. Smith, sopra no. Upper right—Miss Irene Kronbach, pianist. Oval, left—Joseph Tracy, tenor. Oval, right—John de Natali, cornetist. Lower panel—Appomattox Four; Jas. A. Bailey, Lorenzo E. Reid, Geo. C. Cole, Thos. H. Moore, Jr.

"About nine o'clock Wednesday night I heard your station very loud and clear. The song 'Mother Machree,' was very plainly heard," says Philip Lawrence, of Woolwich, Maine.

From Pultneyville, New York, Stanley DuBurck sends this report, "Enjoyed your Wednesday evening program very much. Your signals came in very loud and distinct. Hope you will continue the good programs."

These are typical of the enthusiastic communications which are received in every mail.

The Appomattox Four proved exactly what the name implies, an excellent quartet of Negro male voices of that fine, mellow quality which we associate with the South. The songs of these excellently trained and well-blended voices, heard by WWI listeners-in on the evening of August 29, were chiefly those delightful old Negro melodies which are always enjoyed but never quite so well sung as by those from whom the songs sprang.

Mademoiselle Carron also played several piano solos with a delicacy of touch and feeling which is characteristic of her.

Mr. Hagelthorn's contributions, classic selections played on the harmonica, are always greeted with enthusiasm, and the selections on this program were no exception.

The reading of O'Henry's "The Cop and the Anthem," by Miss Isabelle Chaffin, afforded the finishing touch of humor and realism to the program which has been reported to us by our listeners-in as an altogether successful entertainment.

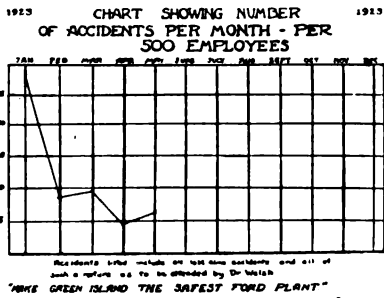
WWI opened its September fifth entertainment with a guitar solo, "The Tropical Blues," by Mr. Basilio Nuesco. Mr. Nuesco further contributed several unusual features to this program by other guitar solos and by his Filipino songs, which had the peculiar charm of that music.

The songs of Miss Mildred I. Smith were delightful. This was Miss Smith's first appearance on

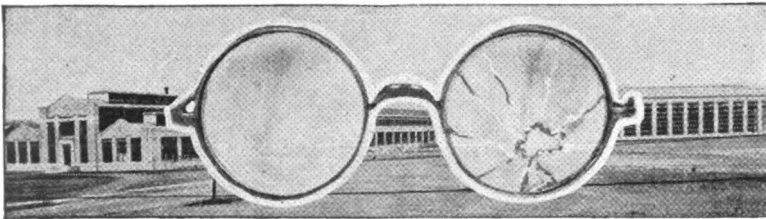
Green Island Plant One of Foremost in Safety Work

An employee of the Green Island Plant was gumming a 14-inch circular saw blade with a portable electric grinder. The small saucer emery wheel cracked into a number of pieces and one struck the lens of the operator's goggles with great force. The workman was wearing goggles

whatever the accident would have caused the loss of his eyesight. The grinder was equipped with the regular guard furnished by the manufacturer—two-thirds of the back and edge of the wheel covered, but the front open. The damaged goggles were shown to employees wearing glasses of their own as a good example of the value of wearing goggles over eyeglasses. They were then displayed on the bulletin board so that all might benefit by the lesson. The Superintendent, Mr. Victor Perini, says, "It's not the financial obligation you have toward a fellow that counts. It's the moral satisfaction of knowing you gave him goggles. He used them and saved his precious eyes." The employees of the Green Island Plant are determined to make their Plant the safest Ford Plant. A very interesting chart showing the number of accidents per month for the entire force is here reproduced. Since the Plant has been organized on a Safety basis the results have been remarkable.



over his own eyeglasses. Although the goggle lens was shattered the man was not even scratched. There is no doubt that had he been relying on his own eyeglasses for Safety or had he been wearing no protection



Do goggles pay? Ask the man who wore this pair.

Safety Movement Keeps Pace With Production

Keen Interest Shown in Every Ford Plant

In an endeavor to keep warm, an employee lit a blowtorch and placed it under a large pail. In a short time the heat was so intense that it caused the torch to explode. The gasoline splattered over the employee, burning him quite severely. A coat or sweater would have answered the purpose and there would have been no injury resulting from its use.

Workmen employed by an outside window washing company were cleaning the windows of the Louisville Plant. One of the men dropped a ladder, narrowly missing the head of the superintendent of the plant. This brought home to him, as nothing else had previously, the fact that carelessness has no place about the plant.

All soiled towels should be gathered up and placed in barrels or put

into tool cribs. Towels are found scattered all over the shop and yards of the plants despite the constant urging to take proper care of them. Approximately 10,000 new towels are furnished to the Highland Park Plant every day and frequently the number runs as high as 15,000 daily. This is in addition to the great number going through the laundry each day. These towels represent a large item of expense.

The Washington Branch reports that there were no lost-time accidents at their plant during the month of June, with the exception of one roadman who injured his foot in alighting from his automobile.

The Iron Mountain Branch recently organized an active Safety committee and it is expected some very interesting information in connection with the Safety work will be received from there.

In a fire test held at the Lincoln Plant on July 21, 1923, the

fire department made a run of 850 feet and had a hose on the third floor in one and one-half minutes after the alarm was sounded.

A small explosion occurred when an employee was in the act of spraying cockroach powder in a 440-volt switch box. The metal powder gun caused a spark which ignited the small powder dust particles. Spontaneous combustion resulted. Practically all dusts will explode when mixed properly with air and ignited.

"Hurry Slowly," Get Home Safely

The matter of carelessness on the part of employees after they leave the Factory has been brought to the attention of Company officials recently. A very unfortunate accident occurred at River Rouge as an employee was about to board a street car. The car started and he attempted to board it. As a result, he lost his balance and was caught between the trailer and the front car. He died immediately afterward. Later on in the week an employee attempted to cross the Pere Marquette Railroad tracks at Dix avenue while the gates were down. A speeding passenger train struck him and killed him instantly.

Here are two men losing their lives that they may get home just a little earlier. There is an old familiar expression "Better late than never" and that should be constantly in the mind of any person while in traffic or any place where caution is necessary.

Reaching one's destination a few minutes earlier does not count for much when the cost is considered. Safety for the benefit of yourself, your family and the "other fellow" should be considered a duty to be practiced both in the Factory and outside.

"Say it with Safety and save the flowers" is well worth remembering.

Good Health Is Your Best Wealth

Very Important Factor for Success and Happiness

The picture of good health! How many times you have heard that expression used. It is a statement of which every man or woman can justly be proud.

One look into the face of the strong, healthy man and somehow you know that he is really enjoying life. His smile is contagious. He enjoys his work, enters thoroughly into the spirit of everything he is given to do, and you may be sure that he will grow up with his job, accept responsibility and become a valuable man to his employer.

Good health is one of the greatest things in life. Its importance cannot be overstressed. And, with the majority of individuals, all that is necessary to enjoy good health is to follow a few simple rules of living and avoid excesses.

At the same time it is astonishing the number of persons there are who neglect to give adequate attention to this most valued possession. They do not seem to have anything particularly wrong with them, yet their attitude toward life is warped and they do not achieve the degree of happiness or success that they should.

Good health and happiness are partners. And they are a team which will carry any individual along the road toward success. In selecting men for bigger jobs—good health is a prime factor. The man who looks sickly, weak or run down has little chance of consideration. A man who does not care enough about his own body to take proper care of it and keep it in a high state of efficiency is not likely to care enough about somebody else's business to give it efficient management.



Follow a few simple rules and enjoy good health.

Little Church on Ford Truck

Solves Problem of Reaching the Man on the Street

"The Little Church on Wheels," is an institution in Boston. It owes its existence to Mr. and Mrs. William H. Morgan who believe in spreading the gospel to the man in the street. It is a church in miniature mounted on a Ford one-ton truck and is further equipped with a radio-receiving outfit. It carries the gospel to the man on the street who does not attend worship in any church of any denomination at any time. No money is collected from the street crowds as the institution is now maintained by the various churches of the city who helped the good work along when the going was the hardest and when the Morgans were bearing the brunt of the heavy expense. The Y. M. C. A. pays the garage rent



Mr. and Mrs. Morgan and their "little church on wheels."

for the car and contributes all the literature which is distributed except the foreign tracts which come from the New England Bible Society. Despite the hardships, Mr. and Mrs. Morgan declare their work is a joy and delight.

Unsigned Letters Receive No Attention

The offices of the Ford Motor Company receive many communications which cannot be considered because they are unsigned and hence lack evidence of good faith. An anonymous letter, no matter how good its purpose, loses its force when it does not bear the identity of the writer.

Any opinion or idea that is worth other people's attention deserves the acknowledgment of its owner.

As has always been the case, letters which bear proper signatures and addresses may be assured of prompt consideration when received by the Company.

Chief of Police to Motorize Department

Motor Car Essential to Efficiency, He Declares

Advantage of Fords Is Low Cost of Maintenance and Durability

Los Angeles is to have a motorized police department if the plans of the new chief of police, August Vollmer, carry. Mr. Vollmer was formerly head of the police department in Berkeley, California. Here he achieved the unique position of being chief of the only completely motorized force in the entire country. He believes in motorizing a city's protective agency so that it can adequately cope with the crime element in the city. He believes that just as the motor car is essential to efficiency in industry and commerce so it is absolutely necessary in police work if the police are to utilize their time to the best advantage. Ninety per cent of the cars used by the Berkeley police department are Fords.

Mr. Vollmer admits that in Los Angeles conditions are totally different and that he must be governed wholly by circumstances. The fact that Fords so far outnumber other makes in the Berkeley department has caused many to comment on their popularity. The chief has explained that when the new "a car-for-every-man" rule was put in force and the city council made a uniform allowance for each car there were several makes brought into use, but little by little, owing to the low cost of maintenance, the Ford gained in favor. "It is only a matter of time," he said, "until practically all the cars used will be Fords. The great advantage of the Ford car is its durability and low maintenance cost." Some of the Ford cars at Berkeley were equipped with radio-receiving sets and extensive tests made, with the result that it was found possible to keep in communication with the entire force every minute of the day.

Ford Dealers throughout the country should make an effort to prove the worth of the Ford and Lincoln cars in police work. At a recent test held by the police department of the city of Detroit between several makes of fast cars, the Lincoln car proved itself to be "the fastest thing on wheels" among the contestants. The city of Detroit Police Department wanted the fastest car made for use by their flier squad.

It takes pluck not luck, to make people successful.—Henry Ford.

Being honest carries its dividends quicker than any investment I know.

You can't hire a man to be honest, he will want his wages raised every morning.

Dealer Uses Clever Display to Present Weekly Purchase Plan



More than 5,000 persons stopped to look at this display.

A very striking and impressive window display on the Ford Weekly Purchase Plan has been installed by the G. T. O'Maley organization selling Ford products in Kansas City, Missouri. "When Dreams Come True," is the title of the display, and its effectiveness is evidenced by the fact that an actual check of the people who stopped in front of the window showed that 5,047 persons stopped long enough to view and comment on the unusual and clever way of awakening the interest of the people in the idea of the Ford Weekly Purchase Plan. This unique display produced twenty-five enrollments and ten car sales to persons

who came in to inquire about the purchase plan and who became direct buyers, during the ten days it was in the window. The entire G. T. O'Maley organization was enthusiastic over the unusual response to the advertising.

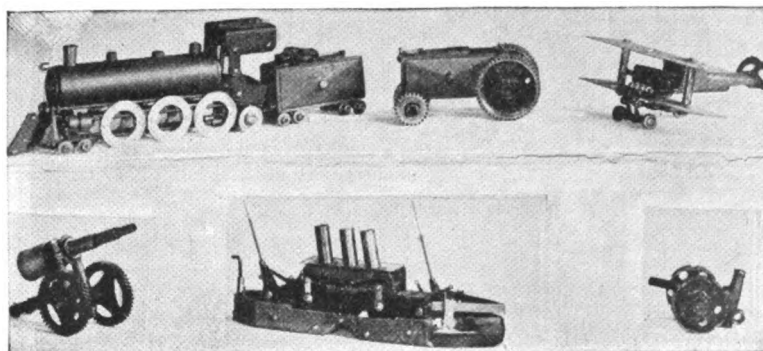
The very realistic display was achieved by mounting a Ford car on a platform behind an irregular hole that had been cut in the beaverboard background, and back of this was dropped a white curtain which produced a white cloud-like "dream" effect. The rest of the fixtures used were of attractive appearance and appropriately arranged.

Novel Parts' Exhibit Depicts Ford Motor Company's Progress

Mr. G. D. Robbins, of the McDavid Motor Car Company, Nokomis, Illinois, has assembled a display of Ford parts that for originality and ingenuity would be hard to equal.

Aside from its being a novel display and a parts advertisement, it signifies much more. It is indicative of the progress of the Ford Motor Company. During the war the Ford Motor Company was organized to produce

war material. This is represented by the Eagle boat and field guns shown in the display. Then the Liberty motor used in the air service is symbolized in the airplane fabrication. The reorganizing and developing of the Detroit, Toledo and Ironton Railroad is represented by the locomotive. Last but not least by any means is the tractor, the implement of peace and productivity.



A splendid illustration of what can be done with Ford parts.

Ford News

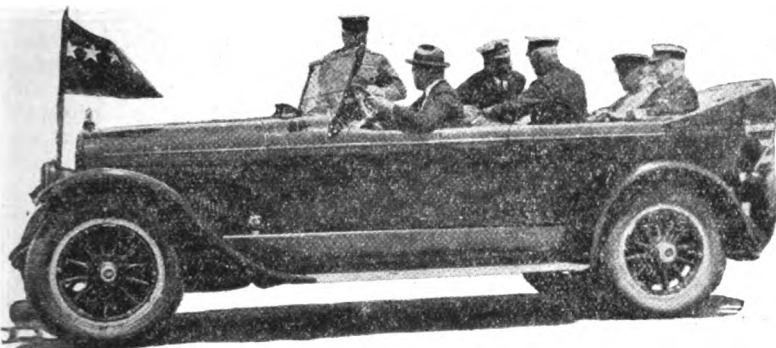
Volume III F

Dearborn, Mich., October 8, 1923

No. 5

Lincoln Carries Officials on Tour of Inspection

*General Pershing Pleased With Performance of
Car; Commends It Highly*



Seated in the car with General Pershing are Admiral Welles, Commander Norman H. Smith, Brigadier-General Pendleton, Admiral Robertson and H. B. Gilmore.

In the accompanying photograph of the Lincoln car is a very distinguished group of army and navy officials, the photo being taken when General John J. Pershing made his recent official call in San Diego to inspect the military institutions in that city. H. B. Gilmore, the Lincoln representative of the R. T. Dawson Company, had the distinc-

tion of being General Pershing's official pilot throughout his visit in the city.

The Lincoln was never late at any given point and in some cases was way ahead of the schedule. General Pershing was immensely pleased with the performance of the Lincoln car, commending it very highly at the end of the day's trip.

Toronto, Ont., Plant Nears Completion

**Million-dollar Factory Is Largest
in the City**

The Ford Motor Company of Canada, Ltd., expects to occupy their new building in Toronto the early part of this month. The factory when completed will be one of the largest in Toronto, the main building covering an area of four and one-half acres, while the entire property covers 14½ acres.

One thousand two hundred tons of steel were used in the structure, one and one-half acres of glass were used in the sides and roof and four acres of tile roofing. The total cost will approximate \$1,000,000. The Plant is located in the outskirts of Toronto in a rapidly developing section, and will be given over mainly to the assembling of cars for the Toronto territory which includes eighty per cent of Ontario.

Hamilton Plant Sets New Record

The Hamilton Plant of the Ford Motor Company set a new high record for daily production of wheels when, on September 19, 9,179 wheels were turned out in a sixteen-hour period exceeding by 495 wheels the former high record of August 2. Another remarkable record was also established on this date when the two millionth wheel was completed.

Production was begun at the Hamilton Plant February 8, 1922, and approximately thirteen months later the millionth wheel was turned out. As an indication of the rapid strides that have been made in production is the fact that the two millionth wheel was turned out less than two months after the first million mark had been reached.

"Today is that tomorrow of which yesterday we hoped so much." If tomorrow we would not again be disappointed we must act today.

41,769 Cars and Trucks in One Week Is Record

Ford World News Notes

Wayland, New York—More than two hundred thousand miles have been traveled by a Ford car placed in the Postal Service here in 1904. For nineteen years it has chugged away between stations and post office, carrying an average of two and one-half tons of mail each day, making a total of over seventeen thousand tons carried. The car is still in good running condition, and it would not surprise the postal authorities if it were placed on the pension list after fifty years of service.

Cape Colony, South Africa—Seated on bulging bags of yellow corn, dusky turbaned natives watch for hours a Ford car driving a corn sheller. Unconscious of the burning sun, the African native lingers to marvel at the ingenuity of the white man who utilizes his car for purposes other than transportation.

Birmingham, Alabama—Hauling four ton loads of Ford Ammonium Sulphate is all in a day's work for a Fordson owned by the Fraser Nursery Company. Mr. Fraser is a one hundred per cent Ford user for, besides improving his land with Ford fertilizer, he owns and operates two tractors, several Ford cars, and a Lincoln.

Vienna—The Weekly Purchase Plan has been introduced in Austria, where the price of a Ford car is 50,000,000 kronen, or \$720. At five dollars weekly, or 350,000 kronen, the easy payments will take three years.

Agricultural College, P. O., Mississippi—The Department of Geology of the Mississippi Agricultural and Mechanical College has just returned from an extensive laboratory field trip that is the first venture of its kind ever attempted. The advance class traversed approximately 5,000 miles.

This trip is an innovation in the study of science, acquainting geological students with almost every phase of geology in the United States as well as helping them to know their country.

Concluded on page 3

Dealers Demand for New Coupe Model Unsurpassed

The week ending September 25 brought a new record in the production of Ford cars and trucks when 41,769 left the Assembly Line. This is the highest weekly production in the history of the Company, exceeding the previous high week of August 7 by 276 cars.

Output continues firm, the October schedule calling for 183,763 cars and trucks to be built by the Domestic Assembly Plants, an average of 6,806 a day, which is an increase over the September schedule.

For the week ending September 18, one thousand eight hundred twenty-six Fordsons and 185 Lincolns were turned out. However, the week following saw an increase in the production of these units with an output of 1,857 Fordsons and 198 Lincolns.

Indicating the popularity of the new Coupe model is the fact that the October schedule calls for 23,503 of this type while the Dealers are calling for more than 43,000. The increased carrying capacity as well as the beautified lines are considered responsible for this remarkable demand. With the approach of the winter season people, particularly business men, are looking for a car that combines comfort, reliability, economy and utility.

Fourteen years ago during the autumn of 1909, the Model T was first placed on the market. Nearly eight and a half million of this model have been produced, bringing to the Ford Motor Company unquestioned supremacy in the motor car industry. During 1910 eighteen thousand six hundred forty-four cars were built, a marvelous manufacturing achievement then, but less than three days' production now.

D., T. & I. Shows Best Revenue

The August financial report of the Detroit, Toledo and Ironton Railroad shows the greatest gross revenue in the Company's history. The income totaled \$957,597. Of this amount, \$560,504 was expended for operating costs. The operating ratio of 58.5 is notable as compared with that of 119.7 for August last year.

August net earnings amounted to \$229,835. From January through August, net earnings were \$1,295,723, as compared with \$388,747 for the same period last year.

Ford News

ESTABLISHED 1920

Issued for the employees of the
various Ford Interests.

Vol. III, No. 23

October 1, 1923

PUBLISHED SEMI-MONTHLY

Motto

Industry has been made the butt of many charges, ranging from that of ugliness to that of destroying the creative abilities of men. The basic motive in these charges is the fact that modern industry has changed special privilege into general privilege and has put the peasant in reach of what only the prince formerly enjoyed. The fallacy which the lily-fingered advocates of a return to the handicraft methods of olden time have fallen into is that all the workers under the old system were "creative." They fancy that monotony is a modern invention. They have only to consider the hours, the conditions, the terms and the legal restrictions surrounding the old household handicrafts to see that modern industry has been a most potent agency in decreasing and almost abolishing both ugliness and monotony.
—Henry Ford.

Do Not Be Deceived

As a moral and economic issue prohibition demands the most serious study of every well-wisher in this country, and in countries beyond the seas.

Prohibition has increased the ability of men to open savings accounts, buy their homes and provide for the wants of their families. It has lessened accidents in factories and on railroads and increased the contentment and satisfaction of home life.

After a quarter of a century of aggressive campaigning, the prohibition law was made a part of our Constitution. And now let us hope it is here to stay.

An advocate of human slavery could stand on higher ground than an advocate of the liquor traffic. Man has been taken from barbarism and civilized. The liquor trade has made degenerates of once civilized people. When it drags them down they seldom come up. The liquor trade has not one redeeming feature. It has broken more hearts than all the slave trade in the world's history.

A little over a year ago Lord Leverhulme, probably the foremost business man of England, after making a study of the effect of prohibition in the United States, said that if England would adopt prohibition she would save enough money in five years to pay off her indebtedness to the United States.

As well as financially, Britain loses physically in her Drink Bill.

Undoubtedly before many years have come to pass they as well as countries on the Continent will come to adopt a measure similar to the American Prohibition Act. Prohibition can never be a complete success in one country until it has been universally adopted. Prohibition in Europe will meet with greater opposition than in the States. Lady Astor's Bill prohibiting the sale of intoxicants to minors may be the first step, and then there will be a second and a third, until England and other European countries are on the same basis as the United States.

Wine growers in foreign countries are struggling to break down the prohibition laws of the United States. It is up to us to stand together and keep them from gaining a foothold in this country.

Since prohibition the morale of almost every community has made wonderful progress. Attendance in both Sunday and public schools has increased. Of course, the demoralizing business of booze dies hard. It has always defied law. It defies it now, but it is going, and let us hope it is passing on forever.

The Heaviest Tax Burden

Every year the tax burden falls with increasing heaviness upon us. We feel it, and often are unprepared for the collector. We blame the authorities, who are not responsible, since but a small proportion of the budget is in their control. Most of the expense has been voted by the people themselves. The issue of bonds must be authorized by popular vote, and we forget that every bond issue adds to the fixed sums annually to be raised by taxes. The interest burden on public debt in this country is almost beyond computation. This must be raised whether ordinary running expenses are met or not.

These taxes could gradually be reduced if every citizen had the concern in public affairs that he has in his own private business.

Yet the amount we pay the tax gatherer is insignificant compared with the taxes we levy on ourselves. The extravagance and waste of the private family, if it were laid aside as it is spent, would take care of the public levy and leave a neat sum.

Benjamin Franklin long ago illustrated this thought in the following words:

"The taxes are indeed very heavy, but if those laid on us by the government were the only ones we had to pay, we might more easily discharge them; but we have many others, and much more grievous to some of us. We are taxed twice as much by our idleness, three times as much by our pride, and four times as much by our folly; and from these taxes the commissioners cannot ease or deliver us by allowing an abatement."

The question is not, will men honor you for your work? but does your work honor you? Your concern is not only to create profits for yourself, but to make that which will profit many besides yourself.—O. S. Davis.

By What Standards Are Men Judged for Advancement?

Six of the Company's Executives Give Their Views on Promotion

By F. C. OSBORNE, Jr.

Men wanted for bigger jobs.

This is the call of the Ford Motor Company in its present unprecedented expansion.

Six factory executives at the Highland Park Plant here give in a composite interview their ideas of the qualities in men necessary to single them out for promotion.

At first, a seemingly remarkable conclusion to be drawn from the talks of these superintendents and foremen is the almost identical standards they use in judging men. But a second thought will show such an agreement natural, for the principles underlying "getting ahead" are as old as history and as fixed as mathematical laws.

First, these men tell you, there is no single principle or formula by which a man can work his way upward.

Experience, training and the ability to stand hard knocks always have been and always will be necessary to growth and capability.

But fundamental to success, each executive emphasizes what simmers down to faith in the "law of compensation."

This law, enunciated by Ralph Waldo Emerson in his essay "Compensation," finds its less literary expression in: "We are paid for what we do."

"Perhaps the greatest factor in holding men down," one executive said, "is the feeling that no matter how hard they work or how capable they show themselves to be, no one will appreciate their efforts."

"That is not a fact."

"At the Ford Motor Company or

Concluded on page 7

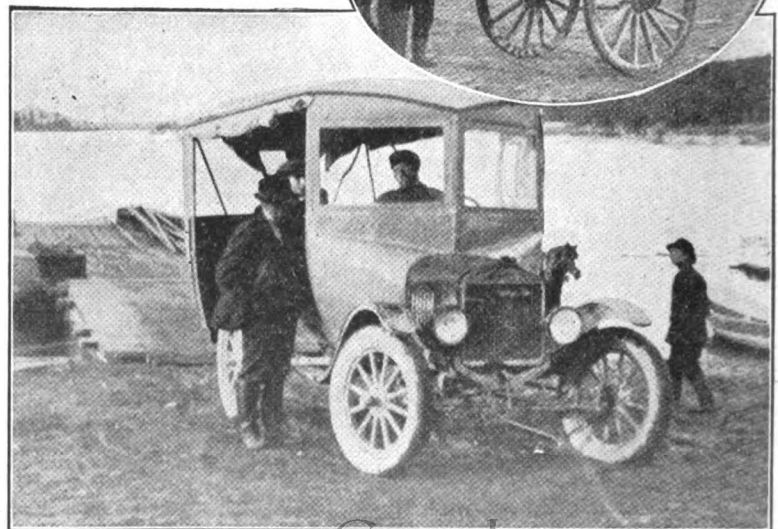
Ford Stage in Lapland

The Ford products recognize no geographical boundaries. You will find them in the torrid tropics working under the blistering sun of the equator. You will also find them operating as efficiently in the frozen northland well within the arctic circle.

In Lapland there is a Ford stage line which carries passengers from Rovaniemi, Finland, to a point on the Arctic Ocean. Rovaniemi is under the arctic circle in a region where winter lasts from October to the first of May. The climate here is rigorous but healthful, marked by long winters and short, hot summers. During the winter the only competition the Ford has is the reindeer. In winter the reindeer are hitched to

sleighs and used for transporting goods over difficult trails. In summer horses are used to draw crude two-wheeled carts. With the improvement in highways the demand for Ford cars is increasing rapidly. Soon the picturesque homemade conveyances will disappear to be replaced by the more rapid and economical Ford. Such is the law of progress. It is being felt in remote corners of the earth. The tireless motor will replace the slower draught animal, whether it be reindeer or water buffalo.

Oval—Unique native cart. Below—Ford stage operating successfully beyond the arctic circle.



Ford World News Flashes

Concluded from page 1

Moscow, Russia—What is believed to be a world's speed and distance record for tractors, was recently made by a Fordson, covering, in ten days, under almost impassable road conditions, a distance of 750 miles between Rostov-on-Don and Moscow.

Immediately following the run, the tractor, on which only a few minor adjustments were necessary, was placed on display at the first Russian Agricultural Exhibit in Moscow.

Boston, Massachusetts—A contractor recently cut two weeks' time and a thousand dollars' cost from a single job with Fordsons. A basement excavation 50x120 feet was to be done, the concrete, brick and rubbish to be hauled away. He figured it would take six weeks and cost \$1,800. His attention was called to the Fordsons. He put three on the job, alternately plowing and removing earth with wheel scrapers. In 30 days the job was done at a cost of \$800.

New Orleans, Louisiana—Airplanes flying over the states of Alabama, Mississippi and Louisiana, making all the principal towns in which there are Ford Dealers, form a novel part of the drive by the New



Orleans Branch to familiarize prospects with the Ford Weekly Purchase Plan. An increased growth in the orders on hand gives evidence to the success of the campaign.

Colville, Washington—A new church is being erected, the concrete foundation and walls of which have been reinforced with parts of old Ford cars.

Such a use for old automobile parts is novel, indeed; but, aside from its uniqueness, one resident of Colville, going under the initials "J. M. H.," found "poetical" inspiration in the plan. Our correspondent's epic carries us off to "a distant age when a group of antiquarian guys began to dig where Colville lies."

Of course, they struck the church's concrete wall, and, working away with might and main, discovered the Ford parts which came to view. Then the narrative comes to its conclusion with the following:

"As piece by piece they pulled it out, The old savant began to shout And wildly wave his arms in air: 'A Fordosaurus, I declare!' They then assembled all the scrap As though they had Mr. Ford's own map, And, while the crowd stood by to scoff, Cranked the thing up and drove it off."

Washington, D. C.—By removing the body from a horse-drawn hearse and mounting it on a Ford one-ton truck chassis, a local undertaking



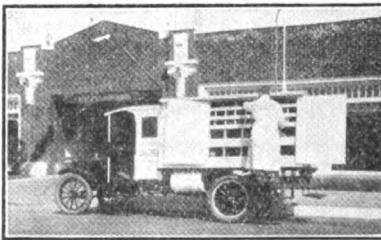
firm has found that this presents many advantages in efficiency and economy over the former arrangement.

Lovington, Illinois—Sixteen different sets of license plates have decorated the Ford car owned by Mr. Fred Cook. This was one of the first automobiles sold in Moultrie County, Illinois, and is still being driven daily by Mr. Cook, who is 79 years old. The engine bears the number 14,930, and, to quote Mr. Cook, "is 15 years old come April and runs as well as the day I bought it."

An enthusiastic Fordson owner, Mr. H. W. Daggatt, of The Dalles, Oregon, tells of his experience with the Fordson tractor. The record made by Mr. Daggatt is certainly interesting.

The tractor was bought in April, 1922. During 1922 he disced and harrowed 65 acres ten times and plowed 15 acres. In addition to this he did one week's outside work for a neighbor. He spent \$104 for kerosene and lubricating oil. For the one week's outside work he collected \$94, making his season's expense \$10. No repairs were required during the entire season of 1922. Up to July 24, 1923, Mr. Daggatt disced and harrowed 65 acres eight times. He used \$90 worth of Distillate and oil. The tractor required repairs to the extent of \$3.75 for labor and five cents in parts. A little outside work pays for the fuel and repairs and leaves the tractor operating expense for the season clear.

Santa Barbara, California—A parts service delivery truck has been devised by a Local Dealer, Mr. E. M. Fillmore. It comprises a regular stock room on wheels, and carries an



assortment of Ford and Fordson parts valued at \$1,800.

At least once a week, and sometimes more often, the truck visits different garages in the vicinity, and covers an average distance of 400 miles weekly. This service has

Fleet of 27 Fordsons Used on Golf Course

55,000 Cubic Yards of Earth Quickly Moved

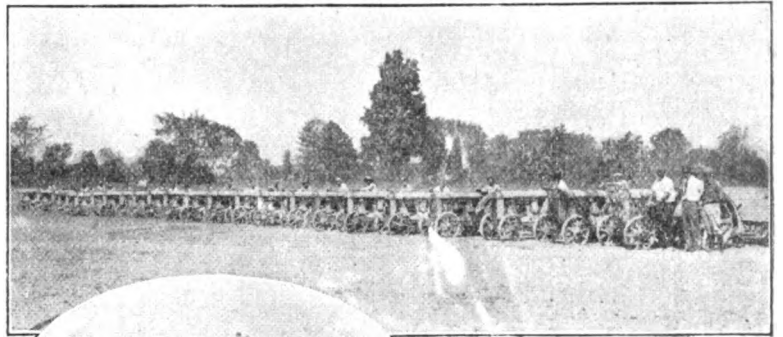
Students From Ford Trade School Receive Training in Tractor Operation

The golf course now under construction on the Henry Ford Farms near Dearborn, Michigan, stands as an example of the Fordson adaptability and efficiency. Faced with the problem of movement of approximately fifty-five thousand cubic yards of earth in the leveling and grading of the fairways, and in the building of the greens and tees, many of which it was found necessary to elevate from two to five feet, a fleet of twenty-seven Fordsons were put to work, operated in part by students from the Ford Trade School. In most cases the earth for the greens

tion of those in charge, a system was devised and put into operation in which each tractor drawing a scraper became a link in a continuous chain, for as soon as one scraper was loaded there was another to be filled. Three men were able to load the scraper for the twenty-seven tractors.

The golf course when completed will be one of the finest examples of the modern undulating golf green courses in this part of the country. The plans provide for eighteen holes which will total 6,473 yards having a par of approximately 72. Great care has been taken in the layout of the course. The first tee, ninth green, tenth tee and eighteenth green will be located near the clubhouse and Military avenue, a fine arrangement and one which prevails at most large courses.

To insure the proper drainage of the course, 66,000 feet of drain



Students from the Ford Trade School with Fordson tractors ready to grade the grounds for golf course fairways. Oval—The beginning of a bunker.

was obtained at distances from the greens varying from twenty-five to one hundred yards. Experiments at the outset proved that one tractor and scraper could move three times as much earth in a given time as a team of horses and seven men loading with the time-honored shovel. Having proved this to the satisfac-

tile has been installed. Also approximately 12,000 feet of water line will be required for the maintenance of the greens, water being piped to each green.

Work on the course is progressing rapidly and it is expected that the course will be open for play about June 1, 1924.

greatly increased the Dealer's sales, and has been received enthusiastically by the garages in this territory.

Robert Hutton, of New Pearce, Florida, reports that a wren raised a family of four in a nest under the bottom of the seat of his Ford truck. The four eggs hatched and the little wrens grew up and flew away. During the whole of the laying and brooding season several trips were made to town, where the car would stay parked for hours at a time. During these trips the mother wren went along if she was there when the car started, otherwise she waited in the trees under which the car was parked at home until its return, when

she would flutter to her strange nesting place. Mr. Dewey A. Dye, an attorney of Bradentown, Florida, vouches for the truth of this story.

Oakland, California—Reduction of switching costs have been brought about by the Lawrence Warehouse and Docks Company by the use of a Fordson equipped for switch engine work. The former switching fee of \$3.50 a car has now decreased to an insignificant figure.

For protection, the front of the Fordson is fitted with a perforated steel plate, and has a regulation drawbar and coupler. When doing switching service it bangs into the end of style, and then chugs away with the train.

Novel Selling Plan Brings Results

Special Office Boosts Purchase Plan Enrollments

Realizing the possibilities in the new Ford Weekly Purchase Plan, the Fries-Malwitz Motor Company, Chicago, have erected directly across the street from their sales room an Enrollment Office, eighteen by twenty-four feet. They have mounted on top of the office a Ford touring car painted a bright yellow with black lettering. This can be seen for two blocks from either direction.

This is known as the Enrollment Office, and enrollments taken are put through the Irving Park National, Portage Park National, or the Albany Park National banks, as these three banks have their signs on the building.

To get as many prospective customers as possible to stop and make inquiries, new model cars are on exhibition, road maps are distributed, a public telephone is available, a sign calling attention to a Comfort Station across the street, shelter for people waiting for street cars, and even baby carriages will be parked free of charge.

A large lot is available immediately behind the Enrollment Office where a large screen is hung, and the new motion picture "Ford Age" and "The Golden Opportunity" are shown on Saturday evenings.

In addition, a local High School Band, Community Singing and Wire-less programs were also added to the list of entertainments.

Used cars are sold on the adjoining lot, attracting numerous prospective purchasers. Comfortable chairs will allow people waiting for friends or street cars to read copies of The Dearborn Independent and other interesting Ford literature.

Results obtained by this unique scheme have fully justified the undertaking and undoubtedly other Ford Dealers can use a similar scheme to promote sales.

Fire Prevention Week--Oct. 7-13

Carelessness Cause of Most Fires; Constant Care Will Reduce Hazards

Fire Prevention Week will be observed this year from October 7 to 13, inclusive. The present rate of destruction of life and property by fire in the United States has never been equaled by any nation in the world. Constituting, as this waste does, a serious drain upon our economic resources, fire prevention is the proper concern of every American citizen.

Whoever you are, somewhere you have a place called home. There you have assembled just those furnishings and possessions which, however unpretentious, convert a dwelling into—something infinitely more. In short, this home of yours, with its associations, is a hallowed spot, made so by the devoted labor of perhaps half a lifetime.

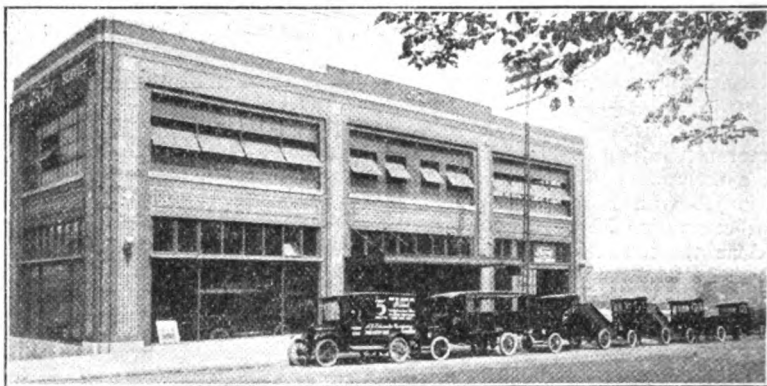
Of the 20,000,000 homes in America, one in every 140 is visited annually by the flames. In the home, where women and children are left unguarded for many hours of the day, occur at least half of the 15,000 yearly fire fatalities. And the reality of it is that three-fourths of America's total fire waste—which reached, last year, the sum of \$521,860,000, or \$993 a minute, and one life every half hour!—is due to carelessness or lack of acquaintance with conditions that breed fire.

Fire-carefulness can be cultivated. Everyone can learn to identify hazards. Experience shows that the chief causes of danger in residential properties are these: *Defective Chimneys and Flues; Sparks on Roofs; Stoves, Furnaces, Boilers and their Pipes; Electricity (misused), and Matches-Smoking.* Out of the twenty-two leading fire causes, these five combine to make up more than forty per cent of the loss in dwellings.

Therefore, you who read this, watch these and other obvious hazards, guard against them and so save from destruction your family and the home that you have established or are helping to maintain.

Prospects Needs Met; Commercial Sales Jump

Sales Resistance Overcome When Buyer Sees Particular Type His Business Demands



A car and truck for every need—

Dealers who precede action with thought will do well to thoroughly investigate the method employed by the N. J. Schmucker Company, of Scranton, Pennsylvania, in their Sales Department. Every day, before making the daily commercial canvas, one of each type of Ford car is stationed in front of the sales station. Then the salesmen are allotted their list of prospects and each salesman visits his prospective buyer in the type of car that the buyer would be most likely in need of. For instance, the salesman visiting a laundry would ride in the covered truck first in the line. The salesman calling on the grocer would take the covered truck with the side curtains, the second in the line-up. Contractors would be interested in the dump trucks and would have an opportunity to investigate first hand the hauling qualities

and power of the dump truck. The general utility car, the fifth in line, would appeal to the buyer who wanted a general utility truck. The last car in the line is sure to please the farmer and the man having business in the city markets. This car is pre-eminently an agricultural car, and one that can be used for various purposes where hauling is necessary. The organization which buys equipment on the basis of careful investigation and consideration of all the important factors is standardizing on Ford products. By taking the particular car in which the buyer is most interested direct to his business operations, he has a chance to see the car at work and is very likely to place his order at once. It is a worth-while practice and is netting the N. J. Schmucker Company many orders.

Philippine Concern Adopts Fordson for Transferring Cargoes

A Fordson tractor equipped with solid rubber tires was recently purchased by the Luzon Brokerage Company, of Manila, Philippine Islands. It is being used in connection with three trailers moving cargoes from the local piers to a warehouse. While one trailer is being loaded at the pier, the tractor is either pulling a loaded one to the warehouse or returning to the pier with an empty. By operating in this way the company saves the salaries of two extra drivers and are also benefiting by the economical operation of the tractor on kerosene—not to mention the advantage of having an investment in three trailers and a Fordson as compared with an investment in three heavy motor trucks.

Fordson Fills Breach When Power Fails

When the local power house at Benton, Kentucky, had to be closed down for repairs it was announced that the citizens would be without lights Monday, Monday night and Tuesday.

Just as everyone was planning to get out the old oil lamps and give them a brushing and cleaning, a representative of the Foreman Automobile Company drove a Fordson to the plant and hitched it up.

It must be said that the Fordson made a name for itself. If any difference, the lights were better Monday night than for some time in the past. The voltage was kept up to 2,500.

Thus the Fordson did the work of a twenty-five horse power engine for more than five hours.

Comparatively little oil, gasoline and water were consumed, and the tractor came through the test with flying colors in every respect.



A publicity plan that brought results.

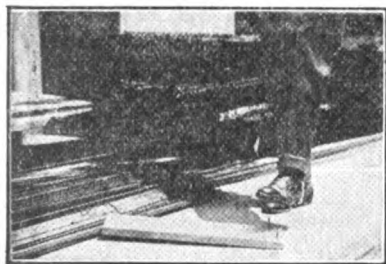
Branches Oust Hazards; Accident Rate Reduced

All Departments Work Together for Safety

Every Plant Making Safe Production a Live Issue in Their Organization

Kearney, New Jersey—Arrangements have been made to print Safety slogans on pay envelopes, such as the following: "A Pay Check Is Bigger Than a Relief Check," "You Are Not Thrifty If You Are Not a Safe Man," "Accidents Take Money Out of the Pay Envelope." "The Cost of Safety Is Only a Thought." A reduction in accidents is shown in the last monthly report. Special protection is provided at gangplanks.

Portland, Oregon—The Safety Committee is putting forth a special effort to keep all their fire doors



Use of nail pullers prevents accidents.

in working condition. The hazard presented by upturned nails in lumber is also receiving close attention at this Plant.

Pittsburgh, Pennsylvania—The July Safety report shows an increase in the number of minor accidents, but a decrease in the number of accidents requiring the doctor's attention.

The fire department is being thoroughly drilled.

Denver, Colorado—After an accident on a saw on the loading dock, a divider or splitter was installed preventing a repetition.

Charlotte, North Carolina—Assembly line has been moved to the first floor. This eliminates driving cars onto the elevator, and possibility of accident is reduced.

New Orleans, Louisiana—After a serious accident at the New Orleans Plant, all foremen and Safety Committee members held a meeting. The reason for the accident was finally given as "Failure to follow instructions."

The danger of slight wounds was also discussed. First aid treatment was stressed. A special campaign will be conducted to encourage all employees to get first aid treatment for all cuts, bruises, and so on.

Cleveland, Ohio—The Safety Committee, during its last inspection, found some fusible links on fire doors covered with paint. This is a very serious hazard.

Sprinkler heads also should be free from any coating that they may function properly in case of fire. A test was made of a sprinkler head in an acid room, and it would not release the water when 500 degrees Fahrenheit temperature was applied. Where there is danger of coating of this kind a glass covering should be provided which will allow the heat to penetrate but keep the head in good condition.

Glassmere, Pennsylvania—This Plant is now organized to make regular Safety inspections similar to the other Branches. Drinking water is receiving close attention to insure a pure supply.

Los Angeles, California—The committee at this Branch endeavors to take everything from the basement to the roof which might cause a fire or an accident. A reduction in fire and accident loss is sure to follow such a procedure. It is easier to stop a bad practice at the beginning than to stop it after it has fully developed.

Washington, D. C.—No lost-time accidents in August at this Branch.

Jacksonville, Florida—The Safety Committee at this Branch believes that if they can prevent accidents it will have a good effect on the mental attitude of the men. They are doing their best to maintain such a condition.

Philadelphia, Pennsylvania—Vapor-proof lights have been installed above gasoline tanks. The inspection of fire hose has been completed and new hose ordered where necessary.

Chicago, Illinois—Foremen are being trained to report and correct unsafe conditions and the men seem to be taking an interest in Safety. Hardly a day passes without some suggestions or requests to have something done to prevent accidents. Bulletins are posted as received.

Seattle, Washington—An inspection of the First Aid Room disclosed a very unsatisfactory condition. The man in charge of this room was requested to remove immediately all of the contents of the first aid cabinets and clean them thoroughly.

Kearney, New Jersey—A special campaign was launched against puncture wounds. Results were very gratifying as frequency of this type of injury was materially decreased.

The Safety Department reports that prior to prohibition it was a common thing to see 20 or 30 men laid out at once in the heat-treats and foundry due to heat prostration, their physical resistance having been lowered by liquor. Under prohibition this condition has been eliminated.

Guards Protect Operators of Trucks

Electric trucks operated by workman standing on front end of truck are somewhat dangerous. It isn't always possible to stop them within a very short space particularly if they are handling heavy loads. Employees have been injured by being crushed against walls, doors and columns because of this bad feature in the truck's construction. Someone with an inventive turn of mind be-thought himself of bumpers which could be fastened to the fore part of truck and project out beyond the driver. These have been applied to electric trucks and they are proving very successful. There is a certain amount of give and spring to these bumpers so that the shock of bumping an object will be distributed



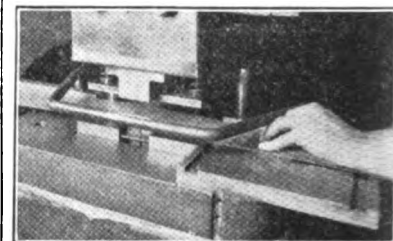
largely through the bumper itself and thereby prevent throwing the operator forward and piling the load on him. This is a Safety First appliance that is thoroughly commended.

How It's Done at the River Rouge Plant

The semi-annual Safety drive was held among the Ford Plants the week of September 3 to 8 inclusive. Good results were obtained. Each general foreman appointed a Safety man from his own department for each day of the week, and these special men worked in conjunction with the regular Safety inspectors. Their daily reports were gone over carefully, and prompt action taken on all suggestions and recommendations. These Safety campaigns are proving very beneficial. They promote good feeling and co-operation between the Safety Department and the men, and prove to the foremen that Safety as well as production makes a department efficient.

Device Warns Operator of Danger

In railroad terms, a low-bridge is something to beware of. "Cat-tails," consisting of long ropes hanging from an overhead wire stretched at right angles with the railroad track on each side of the bridge, give warning to the trainman that he must duck or be swept off the train. Night



Protecting the employee's hands.

and day these cat-tails give warning regardless of weather conditions. With the same idea in view punch press machines throughout the Ford Plants are now being equipped with a guard to protect the operator. As the workman's hand approaches the danger point of operation, it touches the steel guard rail and the operator is warned not to go farther. This device is very efficient and it is being used on a variety of machines where it is practicable.

Safety Weeks Backed by Foremen

The first week in January and the first week of every third month thereafter are known as Safety Weeks and a special effort is made to eliminate all accidents. The foreman in each department appoints one man to make a thorough inspection of equipment and conditions, with instructions to report all hazards found.

Foreman Moran pledged his support in the following words: "We will co-operate to make Safety Week one hundred per cent. We feel that a Safety Week Program is an essential part of an organization such as we are."

Quoting Foreman Dominy, "During Safety Weeks every hazard is checked thoroughly and special instructions are issued to operators of dangerous equipment. For instance, furnace operators were cautioned against the danger of lighting furnaces improperly because of back-firing, and so on."

Superintendent Avery, B Building, is endeavoring to go a week without losing even the end of a finger. There is no reason why woodworking machinery should be more dangerous to operate than any other if properly guarded.

The Employment Offices are co-operating by making special effort to have new employees well instructed in Safety matters.

Be ready for the next quarterly Safety Week. Let this movement grow so that all may benefit by it.

Fordson Operates New Vacuum Cotton Picker

With Tractor-equipped Harvester, Planter's Worries End

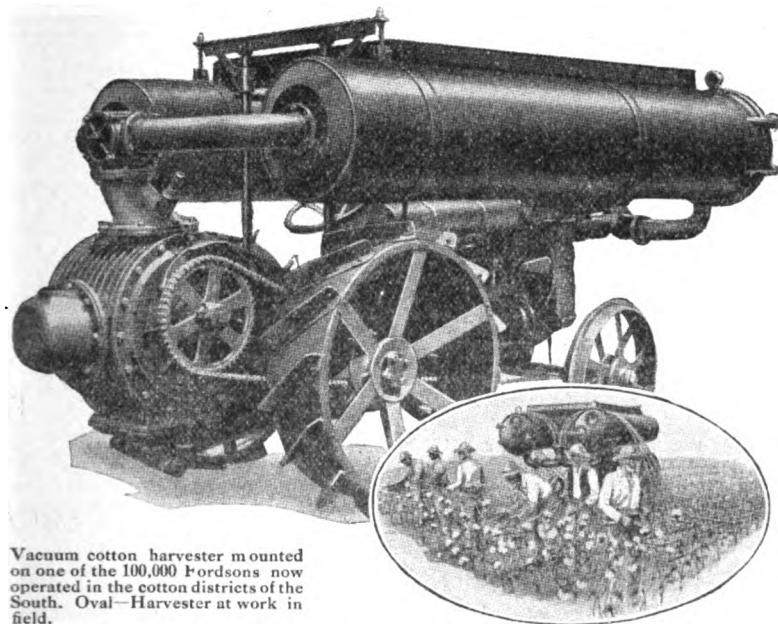
Machine Does Cleaner Work With Less Help and in Shorter Time

Cotton picking by the suction of a vacuum harvester has made good in actual operation. The harvester, which literally sucks the cotton fiber from the boll, is the first really successful machine invented so far.

Cotton must be picked from out of the middle of the boll and it must be taken from a variety of positions, ranging from several inches to six feet off the ground. Three crops are picked from the plant: the bottom bolls ripen first, then the middle bolls

hand pickers and does it cleaner and better. Six pickers work at once, constituting the crew of the machine. Each picker wears a belt, to which is hung the vacuum tube from the cotton-picking machine. The tube forks in the back and smaller tubes lead to two nozzles, one of which is held in each hand, making it possible to work both hands at the same time. Air lines lie along the rows and so do not break down the cotton plants. Whereas 2,100,000 persons had to work 100 days to pick the 1920 cotton crop, if the new machine attained medium distribution it is said the same work could be done in the same time by 350,000 persons.

Due to the exodus of Negroes to the northern industries, the cotton



Vacuum cotton harvester mounted on one of the 100,000 Fordsons now operated in the cotton districts of the South. Oval—Harvester at work in field.

and at last those on top of the plant. This means that the plant must not be destroyed at the first picking.

The machine consists of two big sheet-steel tanks. On the inside of each of these tanks is a cotton sack some twelve feet long with its mouth held open. A tube delivers the cotton from the plant to the tank. This tube leads a flexible rubber hose, on the end of which is a little nozzle less than one inch in diameter. A centrifugal pump exhausts the air from the tank, so that when the nozzle of the flexible rubber tube is opened a powerful blast of air rushes into it. When the nozzle is placed against a cotton boll, the extremely light cotton is caught by the inrush of air and is jerked rapidly into the tank where it is strained out of the air current by the bag, the air passing through the pump.

The whole apparatus rides on top of a Fordson Tractor, of which there are more than 100,000 in the cotton districts of the South. The machine may be attached to the tractor without any modification of the tractor. The machine does the work of six

planters faced a problem that looked truly discouraging. But with the Fordson-equipped harvester they need worry no longer. A machine will pay for itself in a very short time and the cotton picked will be a better class than that picked by hand. In actual operation in cotton fields near Wichita Falls, Texas, in 1922, this Fordson harvester combination picked cotton at the rate of eighty pounds an hour per man, and the cleanliness resulting from its being sacked in the machine high off the ground instead of being dragged over the dirty soil by the pickers induced cotton buyers to offer two cents more a pound for the vacuum-picked cotton. This additional price means much to a planter operating on a large scale. It means more to the buyer and manufacturer of cotton clothing also. At English, Arkansas, the combination machine picked with the greatest ease cotton which had been rained and stormed on until the bolls were rotten. It is estimated that the machine can pick three bales of cotton a day with six trained workmen.

By What Standards Are Men Judged for Advancement?

Concluded from page 2

in any industrial plant a man is bound to have his efforts repaid sooner or later. And if the reward is delayed by other reasons than the fault of the man, payment nearly always comes with compound interest.

"Foremen, general foremen and superintendents are ceaselessly watching and studying men. You may depend on it that your capabilities are discussed by the men over you at least once a month, sometimes much oftener if a man shows development.

In the Ford Plant, the foremen and general foreman directly over the man are those who determine to a large degree whether he goes up.

There is no charity or "pull" here. Sympathy for a man because he has been at the same level a long time or needs more money can't take the place of capability. Foremen are "bawled out" and "hammered at" from above when things go wrong much harder than the man at the machine. If a foreman recommends a man for promotion when that man can't make good at the job, he not only lessens the efficiency of the department for which he is responsible but shows himself a poor judge of men, lessening his own chances for promotion.

After a man has been recommended for promotion by his foreman, his record is discussed by a committee of superintendents and the personnel director. There is a double advantage in this. Such study of a man lessens the chance that he will be moved ahead before he is capable of more responsibility; or facts about his training may come to light resulting in his being placed in entirely different work in a higher position.

At the Highland Park Ford Plant as many as four men have been promoted in one day.

One of the important qualities in a man, determining his fitness for more responsible positions is his ability to stand the "gaff" of censure when he has been lax.

A story of a young foreman who thought he couldn't stand the pressure from above was told by one of the executives.

"This foreman left his job and came to me one day saying he 'couldn't stand it any longer.'

"It developed that his general foreman had just called him down and that he had a healthy grudge against his superior anyway.

"My advice to him was to go home and think it over.

"And after he had thought the matter over he was ready to agree that his ambition to be a superintendent depended largely on his ability to profit by criticism rather than to take it as a personal matter.

"Your best friend is the man who tells you of your faults rather than the man who praises you."

Salesmanship is considered an important attribute to the man who would rise. The executives agree that to handle men effectively the

principles used by good salesmen must be applied.

These executives are constantly "selling" ideas to others. To put an idea "across" without raising personal antagonism is an art requiring study and practice.

Desire to get immediate personal credit for good work or valuable ideas is repressed by the wise salesman in his main purpose to sell his proposition. The credit part will sooner or later take care of itself.

Reliability is a prime essential. Seemingly inconsequential acts tell much of this quality to the observing executives.

If a man is habitually late or absent he had better mend his ways if he wants to get ahead in the Ford organization. If he lives an irregular life, doesn't get proper sleep or exercise, it shows up in his work. He isn't "there" when called upon to demonstrate his ability.

Thrift and saving habits in personal life determine fitness for responsibility. If a man doesn't look ahead and show saving ability with his own property, he isn't likely to do so with the company's property.

Curiosity and interest in your work are held necessary.

"Make yourself a human question mark," one superintendent advises. Questions show a man is thinking. Almost any foreman questioned at the Ford Plants is more than willing to give information to a genuinely interested person.

But don't be a "talker." The man who is always telling others of what he has done or what he is going to do uses up so much of his energy in the telling that he seldom has any left to act. Excessive talking and productive thinking don't go together. Every successful executive has learned how to control his tongue.

Promotion doesn't come in one big jump.

Practically every factory executive in the Ford Plant has worked his way up from the machines. The Company doesn't go outside the Plant to find its executives. Every department head has in his mind the record each man is making and is ready to name a man for the job when called upon for recommendations.

Mechanical training plays a great part in industrial executives equipment. There is no substitute for practical experience but it can be supplemented by reading and study.

Whether or not a man has a good "mechanical head" is shown almost every day in some way. For a machinist, acting without thinking ahead of consequences, almost always leads to disaster.

The records of the Ford executives interviewed are all similar. Promotions came slowly. Hard knocks and even temporary demotions made the way progressively hard.

But you can't keep a good man down.

Winter Comes— Buy Fuel Now



—Kuhn in Indianapolis News

Every winter brings the same old fuel problem. And every winter finds a certain number of persons with empty coal bins. "GET YOUR FUEL NOW" may sound trite but it's good advice nevertheless. Higher prices and delayed deliveries are sure to prevail later on.

Crew of 48 Cut to 8 by Fordson

Seattle, Washington—By adding a Fordson to their equipment, an engineering company, doing construction work on the Seattle Light Plant, has reduced the men in their framing crew from 48 to 8.

The Fordson has a hoist and crane mounted on the front, and a generator mounted on the top.

The hoist is used for pulling and skidding the poles into position, and the crane for lifting the poles on to stands and working them over.

The electric generator generates electricity to drive the electric drill. Previous to the use of this equipment it was an hour's job to bore a hole through a pole by hand. Now two men can put eight holes in a pole in twelve minutes.

Future Programs Station WWI

October 10, 1923, 8 p. m.

Wave Length, 273 meters

Piano Solo—*Grand March* (De Concert): Mrs. Adarae Bratton.

Banjo Solo—*Just How I Feel*: Mr. Leon Weetzer.

Soprano Solos—*The Old Road* (John Prindle Scott); *A Brown Bird Singing* (Hayden Wood): Mrs. Alvah Brachman, accompanied by Miss Maude Gregson at the piano.

Reading—*The New Baby*: Miss Mabelle A. Knowlton.

Vocal Solos—*Time Enough* (Nevin); *Nothin' But Love* (Bond): Mr. V. L. Shevlin, accompanied by Miss Irene Doe at the piano.

Banjo Solo—*March Melodies*: Mr. Leon Weetzer.

Soprano Solos—*I Know* (Charles Gilbert Stross); *A Sunshine Song* (Grieg): Mrs. Alvah Brachman, accompanied by Miss Maude Gregson at the piano.

Reading—*What George Thinks of the Movies*: Miss Mabelle A. Knowlton.

Vocal Solos—*A Banjo Song* (Homer); *A Little Dutch Garden* (Mead): Mr. V. L. Shevlin, accompanied by Miss Irene Doe at the piano.

Steel Guitar Solo—*Melody in F*: Mr. Leon Weetzer, accompanied by Mrs. Adarae Bratton at the piano.

Piano Solo—*Whispering Wind* (H. A. Wollenhupp): Mrs. Adarae Bratton.

October 17, 1923, 8 p. m.

Wave Length, 273 Meters.

Violin Solo—*Valse Triste* (Sibelius): by Miss Margaret Kruke, accompanied by Mrs. L. W. Simpson at the piano.

Baritone Solos—*That Old Gang of Mine*; *The World Is Waiting for the Sunrise*: by Mr. Norman Guild, accompanied by Miss Helen Guild at the piano.

Readings—*Meaneowana*; *Evolution of a Lemon*: by Mrs. W. A. Hourd.

Soprano Solos—*I Passed by Your Window* (May Brahe); *Lassie o' Mine* (Fred Bowles): by Miss Frances Doyle, accompanied by Mrs. Adarae Bratton at the piano.

Violin Solos—*Beethoven Sonata*; *Berceuse* (Tschetchulin): by Miss Margaret Kruke, accompanied by Mrs. L. W. Simpson at the piano.

Readings—*To My Friend* (Mrs. W. A. Hourd); *Making a Sis of Me* (Mrs. W. A. Hourd): by Mrs. W. A. Hourd.

Baritone Solos—*Swinging Down the Lane*; *Cryin' for You*; *Carolina Mammy*: by Mr. Norman Guild, accompanied by Miss Helen Guild.

Soprano Solos—*I'll Bring My Roses* (Fred Bowles); *Selected*: by Miss Frances Doyle, accompanied by Mrs. Adarae Bratton at the piano.

Readings—*The Ladies Companion Boy*; *or Capital Punishment*: by Mrs. W. A. Hourd.

Violin Solo—*Spinning Song* (Hollander): by Miss Margaret Kruke, accompanied by Mrs. L. W. Simpson at the piano.

Teach Children Danger of Fire

Four-year-old Jimmy had found a box of matches in the kitchen and was having the time of his life watching the pretty blaze. His sister, who has been taught the danger of playing with matches at school has taken the box away from him, much to his disgust, and is giving him a severe lecture. She has learned the lesson earlier than most persons do and is trying to teach it to the rest of the family.

Instruction in fire prevention cannot begin too young. Many grown persons are careless with fire because



they didn't form the habit of carelessness when they were children and through pure luck they have never had an accident.

Fire prevention is your protection, both for your home and your job. The Safety Committee or whoever is in charge of fire prevention needs your help in eliminating fire hazards in the plant. If you notice a pile of rubbish or oily rags or any inflammable material in a place where it shouldn't be, report it at once.

"Get into the habit of blowing out the match and stepping on the butt, even where there is no danger."

The same care is necessary at home. It is especially necessary to keep matches out of the way of young children. Playing with matches is a fascinating but highly dangerous indoor sport.

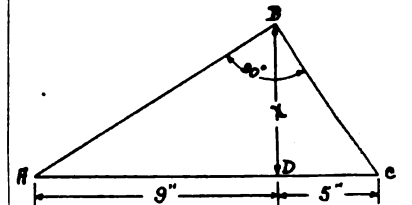
Preventable fires seldom start in clean places. The wife may be a

Problems

If there are explanations or comments regarding problems, write the Henry Ford Trade School, Ford Motor Company, Detroit, Michigan.

No. 68

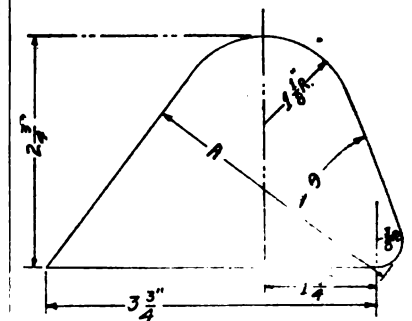
The following drawing has been purposely distorted to bring out details.



DETERMINE x .
TRIANGLE ADB IS SIMILAR TO TRIANGLE CDB . THEREFORE:
 $9 : x :: x : 5$. OR $x = \sqrt{45}$
 $x = 6.7082$

Try This

No. 69



DETERMINE ANGLE θ , AND A .

spotless housekeeper but it is an exceptional home where there isn't a pile of old clothes, newspapers and other combustible stuff in the attic, the closet under the stairway, or in the basement. These are ideal places for fires to start.

A stove left unwatched with the draft turned on may become overheated and start a fire. Kerosene and gasoline should not be kept in large quantities around the house. All open lights should be kept away from them and it is hardly necessary to add they shouldn't be used for starting fires.

Every man, woman and child should learn the location of the nearest fire alarm box and know how to turn in an alarm. After turning in the alarm, stand by the box till the fire department arrives and direct them to the blaze. They know the box from which the alarm was turned in but not the location of the fire and may spend valuable minutes looking for it.

A man should never be ashamed to own that he has been in the wrong; it is but saying in other words that he is wiser today than he was yesterday.—William Penn.

More Than a Half-million Subscribers



acknowledge the real service

The Ford International Weekly
**THE DEARBORN
INDEPENDENT**

renders in publishing dependable information on problems of public interest.

Chronicler of the Neglected Truth

Ford News

Volume III. L

Dearborn, Mich., October 15, 1923

No. 24

September a Good Month

Production Continues Firm; Price Cut Boosts Sales

More than a million and a half cars, thus far this year, is the production mark reached by the Ford Motor Company. These figures include the Domestic and all Foreign Plants.

During the month of September 164,748 Ford cars and trucks left the Domestic Assembly Lines. A grand total of 177,169 were turned out including the production of all Foreign Plants and the Canadian Plant at Walkerville. One year ago, September, 1922, 98,637 cars and trucks were marked up on the production board. This year's figures are indicative of the new stride that has been reached in Ford output.

Lincolns for September totaled 769 as compared with 426 during the same period of 1922. The most striking contrast, however, is shown in tractor production. Last month 7,393 Fordson tractors were built at the Rouge Plant while one year ago the production was 407.

For the week ending October 9, 40,792 Model T's came off the Assembly Lines. During the same period 1,906 tractors and 186 Lincolns were built. The price cut following closely upon the change in models has brought considerable activity in sales. This is particularly noticeable in the case of the four-door Sedan, many Dealers reporting numbers of actual sales the day following the announcement.

The new Coupé continues to be the favorite and the demand for this model is twice the number called for on the production schedule. The present outlook would indicate that production will continue firm.

Fordson Wins Road Record

Russian Peasants Welcome Advent of "Iron Horse"

In setting about the work of reconstructing her devastated farms and reclaiming her wasted resources, Russia has not overlooked the economic importance of the tractor. She realizes that if her people are to be fed, old methods must be replaced by new. As a result, hundreds of tractors will find their places on Russian farms.

As has been reported previously in Ford News, large shipments of Fordson tractors have been sent to

The following cablegrams recently received from Moscow record the latest achievements of Ford products in Russia:

Ford touring today completed endurance run 1,500 miles without any break proving its fitness Russian road great acclaim.

Fordson received first prize in plowing competition beating all other makes.

Russia since the close of the World War. But now come new reports of the Fordson's achievements made under the most rigid tests.

Translations from Russian newspapers relate the story of the performance of a Fordson in a most interesting manner. It was decided by the Allied American Corporation, distributors of Ford products in Russia, to send several tractors from Rostov, in Southern Russia, to the All-Russian Agricultural Exhibition at Moscow. It was further sug-

Concluded on page 4

Work on Twin Cities Plant Well Under Way

Employees May Order Coke Oct. 18

Employees' orders for coke will be taken at all Plants on October 18 for November delivery. Orders for one ton only will be accepted from those living within the city limits and three tons only from those living outside of the city. No complaints on delivery will be accepted before December 1.

Since the Company will take only as many orders as can be delivered during the month of November, each Plant has been allotted a certain tonnage compared to the number of employees. Thus one Plant may still be taking orders after another has finished.

By taking only enough orders for one month's delivery, it is probable that coke orders will be taken on a specified date each month. Ample notice will be given as to just what this date will be.

The Company also wishes to bring to employees' attention the quality of the soft coal that is being delivered daily. As has been stated before, this is Banner Fork Lump, direct from the Ford Mine, and adaptable to practically all methods of heating, besides burning well in open fireplaces. This may be ordered in any quantity.

Don't wait till the frost is on the pumpkin. Order your fuel NOW.

Remember the time last winter when the old coal bin was almost empty and you swore "never again"?

Hydroelectric Project Largest in Northwest

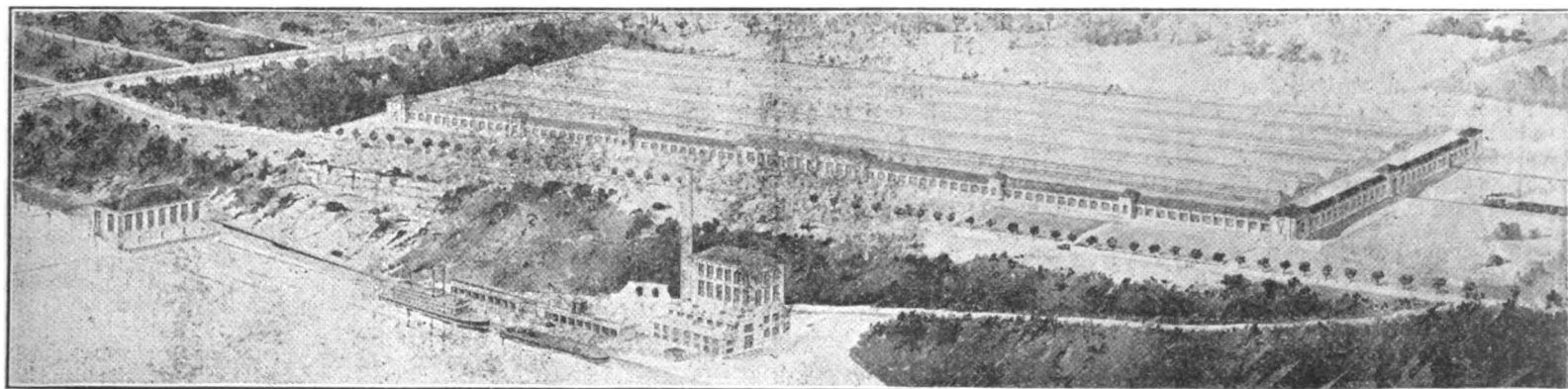
Present Plans Call for Hydro Power House, Steam Plant and 23-Acre Factory

Work has been begun on the Ford Motor Company's most extensive hydroelectric project. Located at what is known as High Dam, extending across the Mississippi River between the cities of Minneapolis and St. Paul, it will be one of the largest projects of its kind in the Northwest.

The government leases have been made and the Federal Water Power Commission has granted the final permits approving the Company's plans. The city of St. Paul has given favorable consideration to the application for a permit to erect the first unit of the new manufacturing plant.

The dam where the power will be developed is 574 feet long and was completed by the government in 1917, making the river navigable from St. Paul to the foot of St. Anthony's Falls, Minneapolis. At this time a lock was constructed on the Minneapolis side and a substructure for a power house was built adjacent to the St. Paul shore. This was done with a view to the future development of water power. But since the completion of the dam, water wheel design has been improved to such an extent that the power house substructure must be modified to accommodate the new turbines. This in itself presented a considerable problem and involved the construction of huge cofferdams and the complete unwatering of that portion of the project. More than 6,000 cubic feet of con-

Concluded on page 4



A general view of the Twin Cities plant. Note river landings with tunnels leading back under the manufacturing building.

Ford News

ESTABLISHED 1920

Issued for the employees of the
various Ford Interests.

Vol. III, No. 6

October 22, 1923

PUBLISHED SEMI-MONTHLY

Motto

Few people live in their own times. They live in some imagined romantic past which was just as common and matter-of-fact as the present is, or in some imagined millennial future which when it arrives will be just as common as today. Their attitude toward their own times is one of indifference or challenge. Yet today is the past brought up to date; today is the threshold of the future. If you can interpret today you have a finer view into tomorrow than the visionary who cannot see today for tomorrow's castles in the air. People are mentally suffering, are needlessly lacerating themselves, because they have assumed that Today means nothing and cannot be interpreted. Yet if today has no meaning, the past was a Blank and the future is a Chaos. But today has a meaning, all the meaning that there is; it is the root, the chrysalis of all that is to come.

—Henry Ford.

"I'll Do the Best I Can"

You pride yourself on saying what you mean and meaning what you say. You boast that your "word is 'as good as your bond."

Yet here is one statement we all make every day without thinking what it really means. We say it to "salve our conscience"; to put off unpleasant duties; to get rid of assuming definite obligations; to excuse ourselves for lack of results and as an alibi for failure to produce.

"I'll Do the Best I Can."

When you come face to face with some disagreeable duty which you put off from day to day because you hate to tackle it and finally you are forced to explain your negligence, you always say, "Well, I did the best I could—that's all anybody can do." You know that isn't true when you say it, but you won't admit that fact even to yourself.

When you cannot escape an obligation any longer, you will try to avoid setting a definite task for yourself and say, "I'll try." It's easy to fulfill that promise and you know it. That's why you say "I'll try" so readily. You may try only five minutes, or an hour, or one day or one week. Then you stop. Yet you have kept your promise. You can say you tried. You can excuse yourself. We

are all good at finding excuses for ourselves.

Even when someone tries to pin you down to a definite promise or agreement—you duck and dodge the issue. You say, "I'll Do the Best I Can."

That statement doesn't mean anything. It is a glittering generality. You know that you never really did the very best you could for one full day in your life.

In the routine of the day's work, some of us think we work hard. Perhaps we make hard work of what we do, but we never do the best we can. Most of us are not over forty per cent efficient even on our best days. At the close of every day, there are dozens of things left undone which were scheduled for accomplishment that day. They could all have been done, too—just as well as not. But they were left undone. They were crowded out by trivial things or they were neglected. So the excuse "I did the best I could" wasn't the truth.

So if none of us are really more than forty per cent efficient and some of us are only ten per cent efficient, that very fact shows that WE CAN ALL DOUBLE OUR EFFICIENCY EVERY DAY and still not really rate very high.

Instead of saying "I'll do the best I can," why not try "I'll see that it's done."

Recreation

The purpose of recreation is just what that word means—to re-create, to repair the damage done the physical or mental powers by exacting toil of the working day. Time was when men worked more hours than now, but the work was not as intense. Production was slower, because the perfection of labor-saving machinery and methods had not speeded up industry. The journeyman knew all divisions of his job, and change of position and activity was a relief no longer available to the man who performs but a single operation.

The evolution of industry has brought about the eight-hour day, and it is true the man who works steadily and efficiently finds himself as fatigued as did his predecessor who worked ten hours, or the still older tradesman who worked twelve or fourteen.

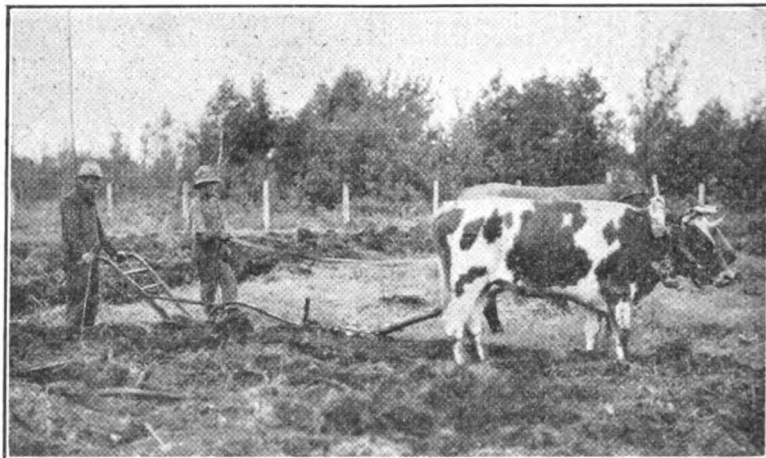
There are only twenty-four hours in a day. Divided in three equal parts, this gives eight hours for labor, eight for refreshment, and eight for sleep. Of the three, the second is the only one wholly in the power of the laborer himself to put to good use or abuse. In the first he must do his work or some one else will; in the third Nature settles the matter, and becomes a restorative of which he is unconscious. As master of himself, he must use the second interval as wisely as if Master or Nature controlled it, if he would make the most of life.

The man who misses his chance; the monkey who misses his branch, cannot be saved.—Chinese Proverb.

A Picturesque Rural Scene— But Crude and Inefficient

The ox team belongs to the generations past and so far as efficiency in either transportation or agriculture is concerned they have served their time. But even in this age of the power farming machinery the oxen have not passed away entirely and strange as it may seem there are still many places in our own states where oxen are being used for farming. Within sight of where the iron

ore, that will be made into tractors, is being mined there are oxen at work today, a striking incongruity. This picture was taken in Northern Michigan in the ore country near the Ford Mines. The ox may have been necessary to the pioneer but today the tractor makes possible the cultivation of thousands of acres of grain where one acre was raised during the régime of the ox.



One reason why boys left the farm.

Fordograms

Poor workers make poor parents, poor citizens, poor friends.

Do Christmas shopping early. Prices are unlikely to be lower.

Wherever you are, be all there.—Goethe.

Many a man doesn't see the light until overtaken by dark days. Don't whine over adversity: profit by it.

Some men never find the key to success because they don't look in the right place—inside their own minds.

Opportunity rarely knocks at the knocker's door.

Make the world your debtor. Then don't worry whether it repays you or not. (It will.)

Possessions cannot satisfy. Heroic striving can.

Life is not found hard by those who live to make it easier for others.

The best investment for a young man: Study.

Ability is important. So is stability.

Understudy the man ahead of you but don't undermine him.

New Books

Libraries today make accessible to people in every part of city and country the best that reading has to give. Then, too, the price of many of the best books has recently come within reach of the purse of practically everyone, making it possible for favorite books to find their places in all home libraries.

In this connection, Christopher Morley has this to say: "Do people never drop into a bookshop for a little innocent carouse and refreshment? Some knightly souls go in not because they need any certain volume, but because they feel that there may be some book that needs them, some wistful, little forgotten sheaf of loveliness, long pining away on an upper shelf." The habit of browsing in a bookshop or library grows on us as we try this experiment, and is a source of increasing enjoyment as we are initiated into its mysteries.

As a hint to nature lovers, old and young, "Autumn Trails," by Emma-Lindsay Squier, has recently come off the press. The adventures of a nature lover in the out-of-doors, as here recounted, are enriched by Indian lore and legend.

Younger children may also enjoy the introduction to David Copperfield, Heide, and other book friends they will make later, to be found in "Boys and Girls of Bookland," by Nora A. Smith, illustrated by Jessie Willcox Smith.

Machine Drives Gear Screws 16 at Time

Assembly Line Spindle Device Cuts Off Five Men

New Operation Far-reaching as Time-saver at Highland Park Plant

One of the most interesting operations, of the many seen along the Assembly Line at the Highland Park Plant, is the sixteen spindle screw driver, which drives home sixteen screws into the starter ring gear in a single operation.

As the transmission comes along, the conveyor bolts and washers are assembled through the sixteen magnet heels, and the bolts turned about, one thread into the flywheel holding the magnets in position. A white metal spool is placed under each magnet end, and a magnet clamp set on top. A brass screw is inserted through a hole in the magnet clamp, passing between the magnet ends, through the white metal spool and a small hole in the flywheel, and into the starter ring gear. All is now in position for tightening the screws and bolts.

Before the sixteen spindle screw driver was placed in operation, six men were required to tighten the screws. Now the work requires but one man, and the operation is completed in the space of a few seconds.

The transmission slides under the spindle screw driver and, with a slight movement of the operating lever, the locating arm is dropped. The locating arm has a notched edge which fits over the four transmission bolts, bringing the screws on the rim of the flywheel directly under the screw drivers, which are suspended from a circular spindle guide plate held in position by a movable head. Each screw driver is encased in a thimble which drops over the screw head and guides the screw driver into the slot, as the motion of the lever is completed. Above the thimble is a coil



Driving sixteen screws in one operation.

Making a Playground Out of the Alley

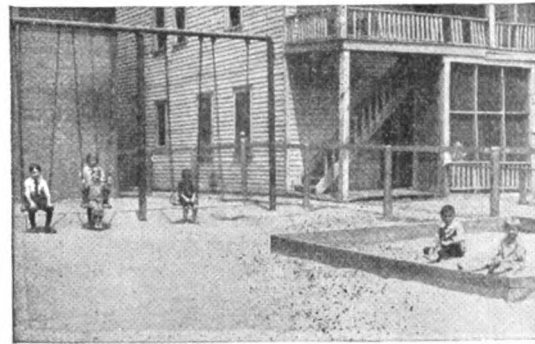


Civic laziness caused this.

Modern industry demands that the manufacturer do more than look after the welfare of the workmen while he is in the factory. The conditions under which he lives on the outside comes in for no small share of consideration. Unhealthful environment means inefficient employees resulting in increased accidents, more absenteeism and greater labor turnover.

Throughout the Ford Industry the importance of cleanliness and sanitation has been stressed and employees have been shown by example the desirability of proper living conditions. Wherever Ford Plants are located special attention has been given to the conditions and surroundings in the immediate vicinity of the Plant which would in any wise effect the employees.

As an illustration a recent investigation of the



Civic pride made this.

restaurants in the neighborhood of the Highland Park Plant revealed conditions that violated even the simplest laws of sanitation, and in many cases the yards and alleys back of these places were filthy. Employees can co-operate not only by reporting such conditions that come to their attention but also by helping to keep their own alleys and yards clean.

Vacant lots become the dumping ground for empty cans and other rubbish. A few minutes' work prompted by a little civic pride would make such places decent and safe. Children do not thrive in "tin can alleys." They have a right to be happy, healthy and surrounded by good wholesome conditions. And the greatest concern of any community should be the well-being of its children.

Look around you. What can YOU do?

spring which keeps the thimble tight, and permits it to slide upward as the screw driver descends upon the screw.

As the screw is driven in the friction increases, more power being used for the last turn of the screw than the first. When the screw has been driven home, a friction clutch, encased in the spindle arm, slips, action ceases, and the screw slots are prevented from being broken off.

From the spindle screw driver, the transmission passes to an eight spindle bolt driver, which works on the same principle as the screw driver. The bolt driver tightens the bolts which pass through the heel of the magnet into the flywheel.

A machine of the spindle type requires much forethought and engineering skill in perfecting. This is but another illustration of where the brain is used to save the hands, and is in keeping with the Ford idea of never using hands where machinery may be used.

The "zero milestone" stands just south of the White House, in Washington, on the ellipse of Potomac Park. From this milestone is measured the distance along the national highways of the United States. The stone is of white marble, and on top is a bronze sundial.

When you are right you can afford to keep your temper; when you are wrong you can't afford to lose it. —Stallier Salesmanship.

Stories of Interest From Sections of Ford World

Alvin, Texas—In the vicinity of Alvin and Algoa, Texas, there are approximately 7,500 acres planted in fig trees. Practically all the orchards are maintained and cultivated by Fordson tractors.

The larger orchards were the first to adopt the Fordson. But the Gulf Coast Fig Orchard Association which has only 800 acres opened the way for smaller orchards by demonstrating the utility of the tractor in its orchards. A fleet of twelve Fordson tractors is being used.

Pasadena, California—To draw cables through electric light conduits required six men until a Fordson was purchased. Now only four men are required and a saving of sixteen dollars a day is made. The truck and equipment formerly used by the Company cost \$6,500, while the Fordson and trailer represent an investment of \$2,500. The tractor is used for numerous other purposes, and never a day passes in which it fails to pay big dividends.

Los Angeles, California—As a decided innovation, and as an appeal to the more fastidious of the motoring public, H. W. Nerney, Ford Dealer, conceived the idea of having his service men dress in white. The additional expense is well repaid in satisfied customers, especially women.

Hastings, Nebraska—The irrigation problem has long presented many difficulties but these have been solved by W. M. Dutton and Sons by the use of a Fordson engine. At the water level of a pit at the pumping plant, a Fordson and a five-inch centrifugal pump were directly connected and set on the same base. An eight-inch discharge pipe led to the surface 67 feet above. A 59-hour test run was made during which 2,124,000 gallons, or enough to cover a six and one-half acre field to a depth of one foot, was pumped to the surface. The oil and kerosene consumed during the 59 hours continuous running amounted to \$8.34, which makes the cost of pumping an acre of water \$1.34, as compared with a cost of \$5.22 an acre when using electricity.

Spokane, Washington—Farmers are turning more and more to light trucks for hauling their produce to market. The National Motor Company, Ford Dealers in Spokane, recently placed ten of the new one-ton trucks with farmers in their vicinity. One farmer who purchased two of the trucks has a wheat haul of 42 miles making the round trip twice daily, a total of 168 miles. He carries 25 sacks each trip.

Continued on page 7

Work on Twin Cities Plant Well Under Way

Concluded from page 1

crete were torn out before the sub-structure could be rebuilt. These alterations are now practically complete and will permit the installation of the modern vertical type of single runner turbines which will improve the flow condition and obtain the highest possible efficiency.

The power house itself will be

plement the water power in cases of emergency. This will be located near the hydroelectric plant and will form a unit of the Twin Cities development.

The Company's site includes 187 acres. The manufacturing plant will be situated at the top of the bluff, 100 feet above the water level. This

Plant of the Ford Motor Company, situated in a setting of such exceptional beauty, will demand more than the ordinary treatment, offering to the architects an opportunity to go somewhat beyond the commonplace in design and construction.

Ground has been broken for the Assembly and Manufacturing Plant. The building will be one story in height, 1,720 feet long by 600 feet wide, inclosing more than 1,000,000 square feet or 23 acres of floor space. That it may detract in no way from the beauty of the drive along the Boulevard, it will be faced with stone on three sides. At the river level, loading platforms will be constructed with tunnels running back underneath the factory to elevators which will carry freight directly into the building.

This is in anticipation of a new era of river transportation on the

lead from the Boulevard to the power house.

The Chicago, Milwaukee and St. Paul Railroad is building a branch line directly to the Plant. This, in connection with the splendid water transportation, will offer the very best shipping facilities.

The establishing of an extensive automotive manufacturing plant at Twin Cities is the introduction to the third chapter in the history of the Northwest. First, lumber was poured into the manufacturing centers, establishing a giant industry which, as the country became settled, was gradually replaced by the flour industry. The time has come when water transportation has made possible the cheaper shipment of wheat, and the flour centers are facing another industrial crisis. The introduction of the automobile industry in this section is a happy solution to the problem.

Officials of the Company who have made a careful survey of the situation state that there is sufficient local labor now available and the importation of outside labor will be actively opposed.

Fordson Wins Record

Concluded from page 1

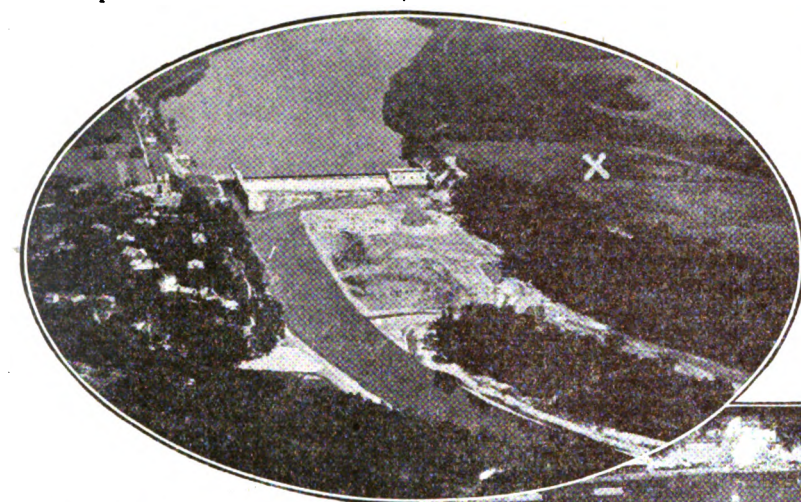
gested that one of the tractors be driven through. The feasibility of such a trip was seriously doubted by many. It was pointed out that the distance was more than 900 miles and that the roads were very rough; also that the longest trip ever made by a tractor was one of 500 miles over good American roads. But in spite of objections and in face of the apparently insurmountable difficulties, the trip was undertaken, and on August 9, the Fordson, hauling a wagon containing supplies, a total weight of 3,500 pounds, left Rostov for Moscow.

Inasmuch as it had been determined that the most direct possible route should be followed, the tractor avoided all paved roads, many times striking out across open fields.

The route lay through many small Ukrainian villages. At these points wondering groups of peasants crowded about the strange little "iron horse." The driver was repeatedly besieged with questions and obliged to stop and explain the tractor and its operation to the curious, interrogating farmers along the way.

One old peasant near Brigaderovka expressed very well the sentiments of those crowds when he declared that he was delighted to have seen a machine that would produce better and cheaper food and which, although he was too old to use himself, would be a blessing to his children.

On August 22, the tractor arrived at Moscow, and was greeted by an admiring crowd, anxious to get a look at the mud-covered Fordson that had made such a record-breaking trip without delay of any kind.



160 feet long, 74 feet wide and 48 feet high above the foundations. In exterior appearance it will conform to the same general architectural treatment and beauty of design that has been followed out in other of the Ford Motor Company structures of this type. The exterior will express most distinctly the general purpose of the structure.

The interior will be laid out not only from the standpoint of the most efficient arrangement but also to present as attractive an appearance as possible. No unsightly wiring or shafting will mar the ceilings or walls. On the other hand, all power, light and telephone circuits will be carried in underground conduits.

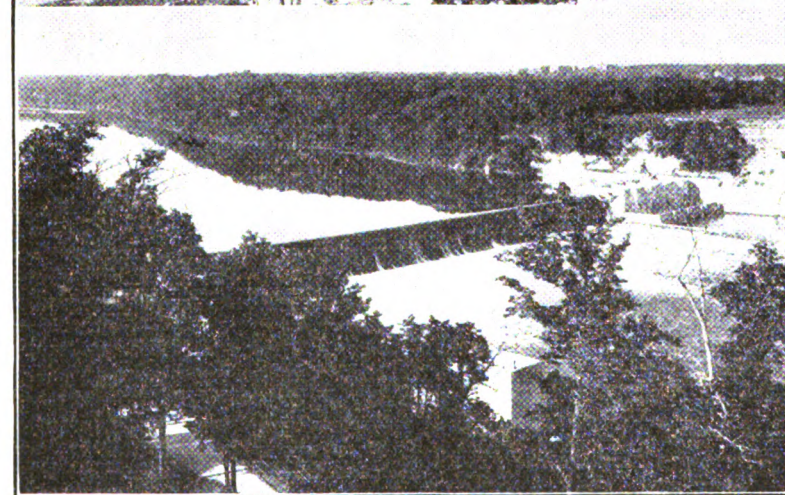
The generator room will be the most impressive in the building. The plans call for a chamber 35 feet wide and 36 feet high extending the entire length of the structure. It will be equipped with a traveling crane of sufficient capacity to handle with ease the largest piece of machinery that will be installed. Another crane will be installed on the upstream side of the building where are located the head gates and trash racks. A bus room, switch room, control room, offices, rheostat, battery and storage are also provided for in the plans.

Four water wheels of 4,500 horse power each will be installed in concrete scroll cases with concrete draft tubes. Under a normal 34-foot head and in conjunction with the four vertical generators they will produce approximately 18,000 horse power. The tailrace will be 1,400 feet long and, that there may be no interference with navigation, will turn the water back into the main channel just below the locks.

In addition to the hydroelectric development, it is also planned to erect a steam power house to sup-



Oval—An airplane view of the Twin Cities project. Factory site indicated by X. Center—Progress being made on power house. Lower—A closer view of dam. Note power house sub-structure at right.



site is considered one of the most beautiful and commanding along the river. The Mississippi River Boulevard runs along the bluff between the plant site and the river, and is surrounded by highly restricted property. Directly across the river is the Minnehaha Park and Soldiers' Home.

It is true that in recent years industry has recognized that construction could be interpreted on terms that include more than utility. As a result, factory buildings and manufacturing plants have assumed a beauty of design that contrasts strongly with the plain, homely structures of the past. The Twin Cities

Upper Mississippi. Already a self-propelled steel barge carrying 150 tons of freight has passed through the locks and docked at Minneapolis.

Careful attention will be given to landscaping and the layout of grounds. Every effort will be made to make the new plant a credit to the city and to develop its grounds to harmonize with the city's plans for the development of the parkway. A parking space will be provided at the Boulevard level affording a lookout over the river valley. Trees and shrubbery will screen all railroad approaches and railroad yards from the drive, and a permanent roadway will

A Few Facts About Gasoline

Once Troublesome By-product Becomes Eight Billion Dollar Industry

A generation ago gasoline was a troublesome by-product of the petroleum industry, selling for as low as three-fourths of a cent a gallon, and often swelling the streams that ran past refineries. Today it ranks second in the nation's industries due to motor transportation, and the consequent consumption of gasoline. Nearly one-half the people of the United States could now take an automobile ride at the same time.

The automobile and motor truck meet one of the most fundamental needs of civilization—that of transportation. The influence of the automobile upon the oil industry shows from an investment of three-quarters of a billion dollars in 1906 an increase to ten times that amount in 1922, or nearly eight billion dollars. To produce the amount of oil used in 1922 American refineries had to fill a 10,000-gallon tank car with gasoline every minute of the year.

The retail price of this appalling volume of motor fuel is equivalent to an average annual tax of more than ten dollars for every man, woman and child in the country.

If winter comes—it will. Get your coal NOW.

Fordson "Handy Man" Around Quarry

Harrisonburg, Virginia—A Fordson is the "handy man" about a quarry. Machinery to operate the quarry was delayed in delivery. A Fordson was connected by a twenty-five-foot belt to an air compressor which operates all the quarry machinery including drills and derricks. A pressure of forty-five pounds was delivered at the tank, and enabled the company to begin operations at once.

The Fordson was put to work pumping water out of the quarry. The tractor was lowered by a derrick, to a ledge of rock sixteen feet below. The water was drawn through a twenty-five-foot three-inch pipe before reaching the pump where it was forced vertically twenty-six feet, and then through an elbow to the outlet pipe leading over the side of the quarry. The pump was operated continuously for a period of forty hours pumping 400 gallons per minute. No adjustments were made to the tractor.

Upon completion of pumping the water, the tractor was used to run a saw for cutting timber.

When large quantities of dirt fell in the quarry, the tractor was lowered, and used with a scoop to remove the dirt.

The company officials are very enthusiastic over the results obtained through the use of the Fordson to solve their various problems.

Ford Dealers Entertain Group of Juvenile Theatrical Stars

When you see a troupe of children appearing at a vaudeville house, you wonder how these companies of young people travel over the long circuits.

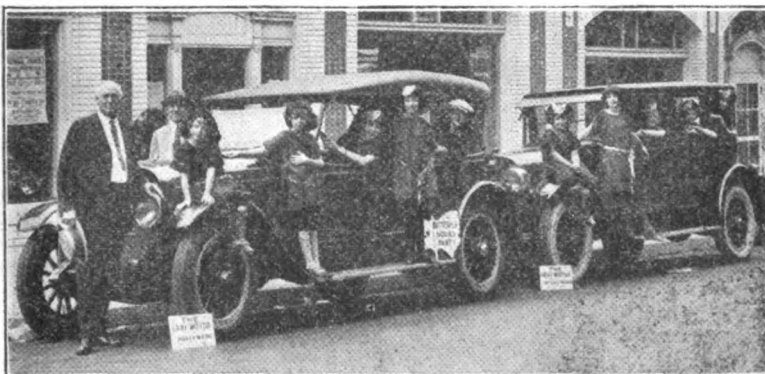
The "Butterfly Kiddies" are one such group, whom you may have seen. Originating in Detroit, they have appeared at theaters in fourteen states—as far west as California.

The ages of these child actors and actresses range from five to fourteen years. In their company are included a nurse, a physical trainer, and a tutor, who are with them all the time.

Ford Dealers in different parts of

the territory through which this gathering of young people has traveled, have taken a fancy to the likable little stars, and have shown their esteem in a way the kiddies appreciate.

On their recent visit to Hollywood, the Gray Motor Company, Ford Dealers, showed the children all the sights of the movie city in a big Lincoln motor car, furnished by this company. In Denver, the same arrangement was made by the Branch of the Ford Motor Company, who conducted the juvenile stars on a motor trip over the Lookout Mountains.



Children enjoy sights of Hollywood.

Ether Waves Vibrant With WWI Programs

WWI radio program of September 26 was ushered in by Victor Herbert's "A Kiss in the Dark," and Schumann's "Träumerei," played by Master Frank J. Taschner, Jr., the boy violinist, whose delightful music is already familiar to WWI listen-

ers. A copy of this talk, which is No. 76, may be had by requesting it by number from the Ford Motor Company, Radio Department, Dearborn, Michigan.

The spell of Hawaii was cast about WWI listeners-in on the eve-



Left—Mrs. R. T. Baker, pianist. Center—Helen Taschner, pianist, F. J. Taschner, Jr., violinist. Right—Mrs. E. H. McCauley, soprano. Below—Ford Hawaiian Orchestra.

ers-in. He was accompanied in these, as well as in his subsequent selections on this program, by his sister, Miss Helen Taschner.

"Bells of the Sea," "Ishtar," an Assyrian love song, as well as the other baritone solos of Mr. Franklin Morgan had distinct charm, and were sung with much spirit. Mr. Morgan was accompanied by Mr. Roland Hilliar at the piano.

The humorous note of the evening was struck by Mr. Ralph Langton, whose reading of "The Mustard Plaster," "The Mayor of Centerville," and Eugene Field's "Scenic Things at Night" was altogether delightful.

Mrs. E. H. McCauley entertained WWI audience for the first time on this evening with her beautiful soprano solos. Mrs. McCauley has a very pleasing voice of rare power, and her selections were most artistically rendered. Mrs. R. T. Baker contributed to these songs that invaluable aid, a thoroughly sympathetic accompaniment.

The radio talk on this evening was given by Mr. J. L. McCloud on "Autumn Work on the Flower Garden." Unless we are seasoned gardeners, we are apt to overlook this important phase of garden work. This talk was most practical, and filled with timely suggestions of incalculable merit for all garden lov-

ers-in. He was accompanied in these, as well as in his subsequent selections on this program, by his sister, Miss Helen Taschner.

Dr. Crissman gave a graphic description of Hawaii, that enchanting island, productive pre-eminently of volcanoes and tropical climate, where we may find nearly all tropical plants and animals except those that are poisonous. Any reader of Ford News who is interested in this island portion of the United States may obtain a copy of Dr. Crissman's talk by requesting, from Dearborn Publishing Company, Radio Talk No. 77.

In addition to the Hawaiian section of the program, Mrs. L. W. Simpson entertained our audience with three delightful piano solos. She also accompanied Miss Josephine Hicks in three contralto solos, lilting lyrics of grace and charm that contrasted strangely with the markedly different fascination of the Hawaiian music.

We have no more right to consume happiness without producing it, than to consume wealth without producing it.—George Bernard Shaw.

Wire for Ford Cars Manufactured by Interesting Process at Highland Park

Need 70½ Miles of Wire Daily to Make 6,500 Generators

Last December the Ford Motor Company decided to do some experimenting in the manufacture of insulated copper wire.

In January, the machinery was ordered. In May, the new industry was producing.

As a result, 70½ miles of 17-gauge insulated copper wire are now produced daily at the Highland Park Plant for the armatures of starter generators in Ford cars.

The manufacture of wire inaugurates another addition to the long list of individual manufacturing units that have become part of the Ford Motor Company's Plants, such as the manufacture of plate glass, cardboard

electric furnace. The wire is plunged into water on a turntable which is revolved until the load is under the furnace chamber. It is then raised into an airtight cylinder to be held at a temperature of 1,045° Fahrenheit for one hour. Air is excluded to prevent oxidation.

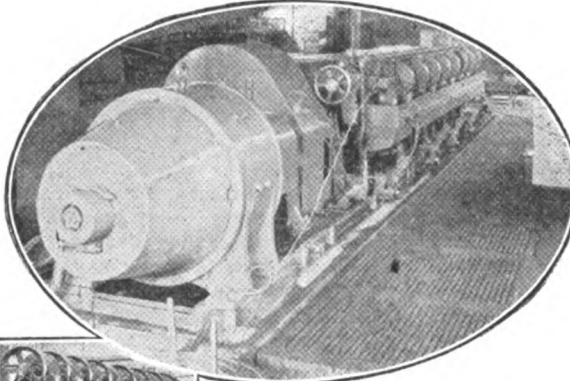
Sudden chilling of copper at a

without appreciable wear. Several days' continuous drilling with diamond dust are necessary to pierce one.

The final die, .044, produces 12 gauge bare wire ready for insulating.

This insulation consists of five coats of dielectric enamel and a wound cotton covering.

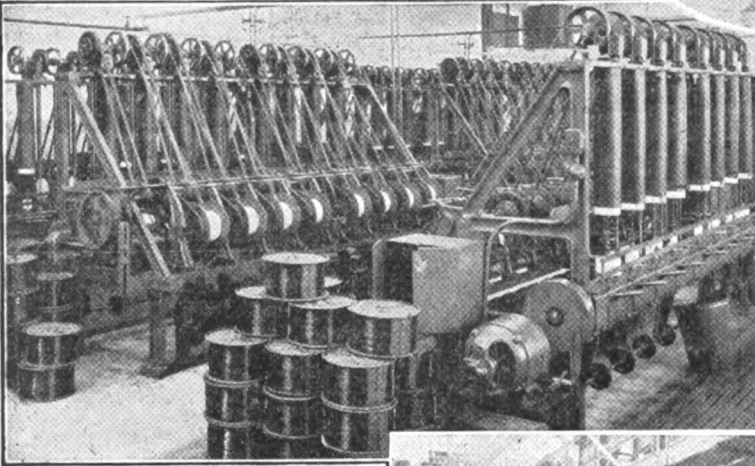
Right—The drawing machine showing in foreground the copper wire starting through the dies.



Enameling is continuous and automatic. Four men easily take care of 80 rolls of wire at once as they are unwound and rewound with each enamel coat baked on at 845 degrees Fahrenheit.

The enameled wire, every inch inspected for roughness or breaks in enamel, is passed to the winding machines. Bad stretches of wire are cut out and the ends brazed and re-enameled.

Cotton spinning machines have



Above—Seventy-two cotton covering spindles, spreading covering evenly and tightly over the wire, adding only .003 to the diameter.

for body parts, artificial leather, etc.

The problem in making 6,500 generator units daily calls for absolute standardization of parts, particularly of wire size. If the wire winding on armatures is as much as a hair off size, if the insulating cover is slightly thick or irregular; either the winding will not fit in armature segments or lower generator efficiency will result.

Improvements and simplification of standard wire making machinery have placed this wire plant ahead of many others both in quality and economy.

The process starts with 5/16 inch copper rod stock similar to that used for trolley wires. This is drawn through nine successively smaller chilled iron dies.

Wire from the last die is about 3/32 inch diameter, traveling to the winding spool at a speed of 725 feet per minute.

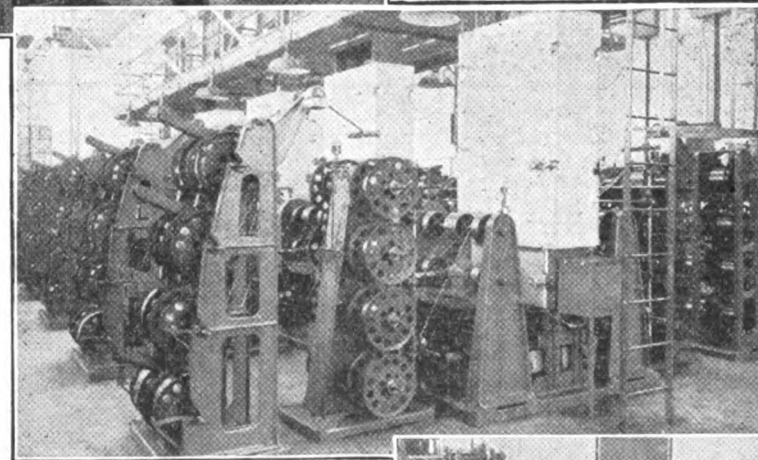
The drawing process causes much heat which is carried away by water flowing over the dies. It also tends to make the wire hard.

To soften for further drawing the wire is annealed in a water-sealed

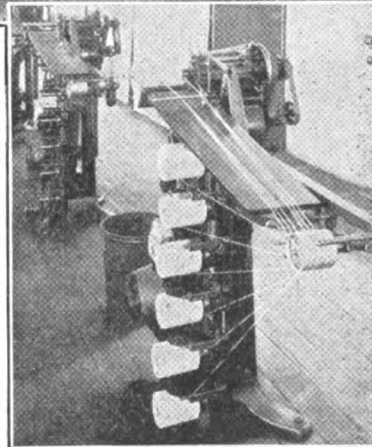
red heat produces a different effect from that on steel. Where steel is hardened, copper remains soft. The red-hot wire is therefore plunged into water again and is ready for a second drawing.

Machines for the second drawing are fitted with eight pierced diamonds through which the wire is drawn, each reducing the size a few thousandths of an inch.

These diamonds, which may cost \$300 each, can be used six months



Above—Enameling eighty rolls of copper wire simultaneously. Right—Winding machines for making 18-end cotton from single-end cotton.



prepared 18 ply or "end" cotton wound on bobbins for the winding machines.

These bobbins whirl around the wire as it passes through them, winding an even coating of cotton at great tension over the enameled surface. Due to the automatic process, four men here take care of the work of 72 spindles. The machines are all automatic entirely.

The Starter Department reports this new Ford product is "up to specifications."

Ford Car Helps Paper Gain "Scoop"

Not long ago the night staff of the *Star Journal*, Pueblo, Colorado, were going through their regular routine, when suddenly the unexpected happened. From items of everyday interest the telegraph had jumped to news that would startle the world. The story was hardly off the wire before gigantic presses were casting forth pile after pile of extras which were loaded on automobiles for different parts of Southern Colorado.

Among them was an ancient Ford, and the thing that Ford had to do was to be in Monte Vista before the arrival of the train which had left two hours and thirteen minutes before bearing other papers which carried the big story. Wise men laughed at the undertaking, but the driver knew the stuff in that battered Ford.

At two minutes after two the Ford, with two men and 500 pounds of paper, left the *Star Journal* office. Papers were dropped at Walsenburg and Alamosa, and the Ford continued over boulder-shrewn roads, up the steep incline to La Veta Pass, doing every inch in high gear.

Seventeen miles in twenty-six minutes, through mile after mile of deep sand, was the record made on the last lap.

The *Star Journal* was the first with the news and an important circulation scoop was made, as the train carrying other papers did not arrive until an hour later.

The master of the salt water steamship *Agga*, from Bergen, Norway, refused to accept the aid of tugs to pull his vessel off a sandbar in the harbor of Superior, Wisconsin, where she had grounded. He preferred to wait for the tide and was surprised when it did not come in.

A bottle consigned to the sea off the coast of Japan by the Navy Department of the Japanese Government in April, 1921, was found on the shore at Tillamook, Oregon, not long ago. It is 4,700 miles from Oregon to Japan in a direct line.

There is a policeman in every man's conscience through you may not always find him on the beat.

Safety Methods Advance With Growing Industry

"An Ounce of Prevention Is Worth a Pound of Cure"

Form 9582, the new accident report, is the last word for forms of this nature. It is complete in every detail. There is one thing that should be called to the attention of every foreman handling these reports. The department number and name of the foreman should always appear in the upper left corner in space provided for when the department has no lost-time accidents for any one month.

Mr. Croul, Police Commissioner of Detroit, is responsible for the new law recently put into effect whereby all officers are to arrest any autoist who becomes a nuisance by blowing his horn unnecessarily. This is due not only to impatience but to downright ignorance and often results to the detriment of any sick person in the vicinity.

Amid the roar and intense activity at the Highland Park Drop Forge Department, one of the world's largest, Safety goes hand in hand with high production.

Here, 1,800 men operate a maze of machines of various sizes and shapes, daily forging 450 tons of steel into 5,000 front axles, 5,000 crank shafts and 315,000 sundry pieces.

In such a department, where machines each weighing many tons deal crushing blows to fiery metal, workmen must have a thorough knowledge of every Safety principle. To accomplish this, regular noon-day Safety assemblies are held in the department, at which the employees are shown the correct manipulation of the machines, and given Safety talks.

The meetings are crowded with the men who realize the value of such instruction. By holding the demonstrations at the department in the proximity of the machines enables a more practical and clearer demonstration.

Cincinnati, Ohio—The committee will hereafter inspect all life belts before they are used by window washers, even though this work is done by an outside company. Responsibility for Safety rests with the company, as the following clause in outside contracts indicates: "The work is to be done with a reasonable degree of Safety as regards persons and property, and if a question arises, same shall be referred to the Owner's Director of Safety, whose decision shall be final." This provision does not, however, relieve the contractor from liability for damage or injury to property or persons."

Minneapolis, Minnesota—A special chart has been devised for use of the Safety Committee on inspections (Safety and Fire). Several Branches are adopting this efficient method of making inspections.

Green Island, New York—Committee reports goggles sterilized. Following a notice in the last Ford News relative to use of goggles on all shapers, Mr. Clark was requested to see that all goggles were sterilized after each use. Had been sterilizing them every other day or so. Also called attention of N-2 foremen to the paragraph relating to shapers.

Manchester, England—A representative of the British Industrial Safety First Association made an inspection of the works and expressed his appreciation of the Safety devices which were fixed on all machines and the methods generally adopted for the Safety and protection of employees.

Dallas, Texas—The Safety Committee is testing speeds on all emery wheels to ascertain whether they are within the speed limit of 6,500 surface feet per minute. Air hammers are being equipped with a device which will prevent plungers from flying out.

Stories of Interest From All Sections of Ford World

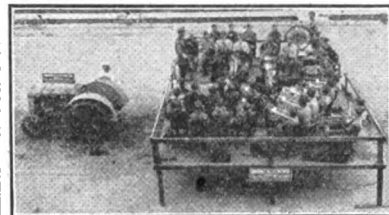
Concluded from page 3

Amsterdam, New Netherlands—Operating over a distance of approximately four and one-half miles from this city to a suburb, a novel Ford train has given the best of service at a minimum cost for more than a year.

The train is composed of a Ford car which pulls two or three trailers with flanged wheels along rails in the middle of the streets. Both the automobile and its trailer have large coach bodies. The train has a capacity of 250 passengers and a speed of twenty miles an hour.

It is not surprising that this unique innovation in street railway operation should emanate from Holland, whose people are noted for their ingenuity and thrift.

Bolivar, Missouri—Saturday night is band concert night. The crowd has already gathered in the square, but as yet there is no sign of either band or the platform from which they play. Then from around the corner comes a Fordson drawing a



movable band stand on which the band is seated in readiness for the evening's entertainment.

After the concert the Fordson again performs its duty by moving the wooden stand from the public square.

Tallahassee, Florida—That women can sell Ford cars as well as men has been demonstrated by Mrs. Harris, one of the sales force of the Local Dealer. Mrs. Harris' enrollments for the Ford Weekly Purchase Plan include the Governor of the State, the Attorney-General, two members of the Governor's Cabinet, two Supreme Court judges, and three college professors.

Speed in travel appeals to the Chinese and thousands of Chinese take joy rides simply for pleasure. It is no uncommon thing for a poor coolie to spend his last "cash" on an automobile ride that leaves him stranded many miles from home. He is satisfied to trudge back complacently and is satisfied in his own mind that his money has been well spent.

Gasoline bootleggers are operating on the outskirts of Los Angeles, California. The bootlegger buys casing head gasoline at the oil fields close by for nine and ten cents a gallon. It is then either blended with benzine or kerosene or sold straight. The result is a wild and dangerous fuel, causing the motor to back-fire and overheat.

Christmas Island, a speck of green in a far corner of the Pacific just north of the equator, is inhabited by two Frenchmen and twenty-five Tahitian natives. The island is in a wild state and has only rough tracks under the cocoanut trees for

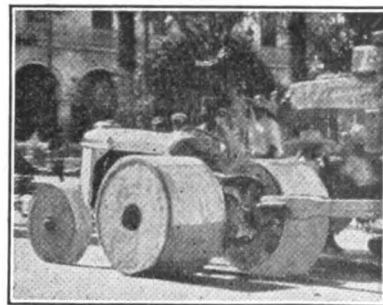


roads. Recently the captain of a war vessel visited the island.

He was much surprised to see under the branches of the cocoanut palms a Ford car, ready to take him on a trip around the island. The top had been taken off so it could pass under the trees. The captain reports that the car had received little attention in six years, and although it looked dilapidated enough its performance was perfect.

Salt Lake City, Utah—Cleaning three 1,000-foot flues at the Garfield smelter is completed in record time by a Fordson equipped with a scoop shovel attachment. Each flue accumulates five feet of dust in the course of a year. Before the Fordson was put on the job, men were employed using wheelbarrows in conjunction with horses and dump-carts. This method kept the flue out of operation for three weeks. The Fordson does the work in 48 hours.

Ford tractors equipped with solid concrete wheels are used in Guadalajara, Mexico, for pulling mahogany timber. Mahogany timber is very heavy and as the roads are sandy it



is necessary to have broad wheels or "self laying tracks" of the caterpillar type in order to make any headway and time in transporting heavy loads. Mexican Dealers are rapidly adapting the Fordson tractor to many of the problems confronting the industrial operators throughout the Republic and within a short time the tractor will be as well known throughout Mexico as are Ford cars and trucks.



One of the regular Safety demonstrations at the Drop Forge Department.

Ford Motor No. 8,500,000 went off the Assembly Line at the Ford Motor Company's Plant in Highland Park on October 4. The last half-million motors were produced in seven days less than three months, for Motor No. 8,000,000 went out July 11, this year.

Future Programs Station WWI

October 24, 1923, 8 p. m.

Wave Length, 273 Meters.

Quartet—*Let the Rest of the World Go By; In the Evening by the Moonlight; Indiana Home; Tomorrow:* by Holden Avenue Plant Quartet (E. J. Fenrich, G. R. Scott, J. Sanderson, F. Marsh), accompanist, Mrs. G. R. Scott.

Orchestra Selections—*Dreamy Melody; That Old Gang o' Mine:* by River Rouge Orchestra.

Boy Soprano—*Carolina Mammy; Swingin' Down the Lane:* by Mr. Norman Herr, accompanied by his brother, Harold Herr.

Health Talk No. 79—*The Psychology of Medicine—Admission to the Hospital, the Best Way to Results:* by Dr. Durham, Department of Medicine, Henry Ford Hospital.

Solo—*My Ain Folk:* by Member Holden Avenue Quartet.

Quartet—*Carry Me Back to Old Virginny; Old Black Joe (Chorus); When Will the Sun Shine for Me?; Barney Google:* by Holden Avenue Plant Quartet, accompanied by Mrs. G. R. Scott at the piano.

Orchestra Selections—*Bridal Rose; French Trot:* by River Rouge Orchestra.

Boy Soprano—*That Old Gang o' Mine:* by Norman Herr, accompanied by Mr. Harold Herr at the piano.

Quartet—*Wyoming Lullaby; My Little Girl (Chorus); When You Were a Tulip:* by Holden Avenue Plant Quartet, accompanied by Mrs. G. R. Scott at the piano.

October 31, 1923, 8 p. m.

Wave Length, 273 Meters.

Orchestra Selections—*Treat 'em Rough (Lou Davis); You're Sugar (Seymour Simons); Swingin' Down the Lane (Isham Jones):* by Ford Orchestra.

Baritone Solos—*Smiles; Call Me Back, Pal o' Mine:* by Mr. J. H. Beatty, accompanied by Miss Leanna Oliver.

Soprano Solos—*I've Been Roaming (Horn); Open the Gates (Knapp):* by Miss Ruth Plantz, accompanied by Mrs. Florence Burke.

Reading—*Hallowe'en:* by Mr. Walter Griffith.

Baritone Solos—*I Found a Rose; Why Should I Sigh Over You?:* by Mr. J. H. Beatty, accompanied by Miss Leanna Oliver.

Orchestra Selections—*When Will the Sun Shine for Me? (Benny Davis); Cut Yourself a Piece of Cake (Lou Pollock):* by Ford Orchestra.

Soprano Solos—*Good Bye Summer (Synes); The Valley of Laughter (Sanderson):* by Miss Ruth Plantz, accompanied by Mrs. Florence Burke.

Orchestra Selections—*Bees' Knees (Ted Lewis); Wonderful One (Paul Whiteman); River Shannon Moon (Walter Smith):* by Ford Orchestra.

October's Bright Blue Weather



Indian Summer

SINCE the beginning of literature we have read tributes in prose and verse to "Brown October"—the golden autumn—and that glorious season, not officially registered in the calendar, Indian Summer, that time of bronze and scarlet and sunlight which occurs about now.

Some of us have always known the fullness and significance of the writer's words in praise of this time. Now all of us can know the splendor of the season and, if there is poetry in our souls, can translate the written praises of the past into our own experience. Ten minutes after leaving office, shop or home, we can arrive where Indian Summer may be felt, known and lived; in the open places, well called "God's Country."

How good to live in this era! How fortunate to be the owner of a Ford car which allows one to know in full the real joy of life which at one time was found but in books or the verses of poets.

November 7, 1923.

8 p. m. Eastern Standard Time.

Wave Length, 273 Meters.

Piano Solos—*Selected:* by Mrs. R. J. Hall.

Soprano Solos—*Morning (Spea's); My Love Is a Muleteer (Francisco De Rogers):* by Mrs. R. S. Baker, Mrs. R. J. Hall at the piano.

Whistling—*Moments Musicale (Schubert); May Morning (Denve):* by Mrs. Herbert C. Edwards, accompanied by Mrs. Charles W. Moore at the piano.

Tenor Solos—*Kerry Dance; Home Again:* by Mr. Joseph Atkinson, Miss Olive Boyer at the piano.

Health Talk No. 80—*The Psychology of Medicine—Seeing the Doctor:* by Dr. R. Kendall, Department of Medicine, Henry Ford Hospital.

Whistling—*Imitations of Some of America's Well-Known Song Birds:* by Mrs. Herbert C. Edwards, accompanied by Mrs. Charles W. Moore at the piano.

Tenor Solos—*Dreaming Alone in the Twilight; Tommy Lad:* by Mr. Joseph Atkinson, accompanied by Miss Olive Boyer at the piano.

Piano Solos—*Selected:* by Miss Olive Boyer.

Soprano Solos—*Valley of Laughter (Sanderson); Gipsy Love Song (Herbert):* by Mrs. R. S. Baker, accompanied by Mrs. R. J. Hall at the piano.

Remote Sections Have Motion Pictures

Ford Truck Equipped With Cinema Outfit

Will Tour Southwestern U. S. and Mexico; To Meet Long-felt Need

Introducing motion pictures to places so remote from civilization that they have neither electric lights nor cinema theaters, has been made possible through the ingenuity of Lloyd L. King, Ford Dealer, at Huntington, California, and Sam Remillard, an itinerant entertainer.

A large closed body, mounted on a Ford truck, has been equipped to meet the special needs of a traveling showman. Shortly the truck will start a tour through the Southwest with Mexico City as its objective.

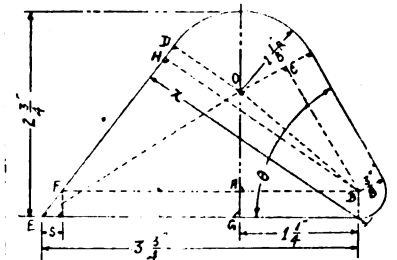
On the floor of the truck is mounted a 10 K.W. generator, which is run by the Ford engine. Power is

Problems

If there are explanations or comments regarding problems, write the Henry Ford Trade School, Ford Motor Company, Detroit, Michigan.

No. 69

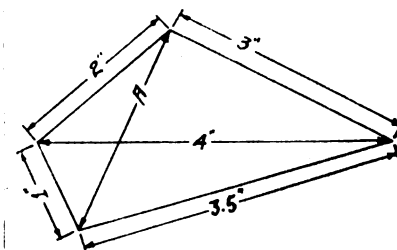
The following drawing has been purposely distorted to bring out details.



DETERMINE ANGLE θ AND λ .
 $AO = 2.75 - (1.125 + .375) = 1.25$
 $\angle ABO = 45^\circ$ $BO = 1.25(\sec 45^\circ) = 1.7677$
 $CO = 1.125 - .375 = .75$
 $\sin \angle OBC = CO / BO = .42428$ OR $25^\circ 6' 16''$
 $\theta = 45^\circ + \angle OBC = 70^\circ 6' 16''$
 $OG = 2.75 - 1.125 = 1.625$
 $EG = 3.75 - 1.25 = 2.5$
 $\tan \angle DEG = OG / EG = .65$ OR $33^\circ 1' 26''$
 $EO = EG / \sec \angle DEG = 2.9817$
 $\sin \angle OED = DO / EO = .3773$ OR $22^\circ 9' 55''$
 $\angle DEG = \angle OEG + \angle OED = 55^\circ 16' 15''$
 $S = .375(\cot \angle DEG) = .25994$
 $FB = 3.75 - S = 3.49$
 $\lambda = FB(\sin \angle DEG) + .375 = 3.2432''$

Try This

No. 70



DETERMINE A.

transmitted by means of a chain belt, and a jack shaft, which is mounted beneath the driver's seat.

The interior of the truck carried a rheostat, switchboard, ammeter, and other apparatus, giving the appearance of a chief electrician's headquarters.



Isolated communities now go to the movies.

quarters. A long heavy insulated cable is provided to carry the current to the motion picture projecting machine. As far as can be ascertained this is the first outfit of this kind to be built.

A man is already of consequence when it is known that we can implicitly rely upon him.

BENTLEY HISTORICAL LIBRARY



3 9015 07153 9004



